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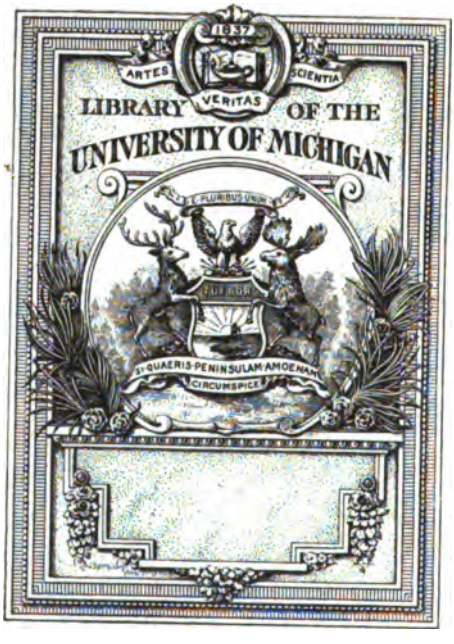
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COMMERCIAL RELATIONS OF THE UNITED STATES.

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REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

1 9

No. 27.—January, 1883.

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

JANUARY, 1883.

AMERICAN PORK PRODUCTS IN GERMANY.

REPORT BY MINISTER SARGENT, OF BERLIN.

I have the honor to report that a very strong feeling of opposition has been aroused in Berlin and other German cities as well as in the manufacturing districts generally, against the threatened exclusion of American pork products.

Strong protests are being sent in to the Bundesrath, and committees of merchants and others have visited the capital to protest against the measure. Editorials in leading papers have fully exposed the falsity of the excuses for exclusion.

If this were strictly a government of public opinion in the American sense, these general public appeals, backed as they are by solid reasoning upon indisputable facts, would prevail, and the project would be abandoned. But this is far from being the case, and the prospect is stronger than ever that the decree will be issued. I am informed that Mr. Bottischer, the imperial minister of the interior, informed a protesting delegation during the past week that the measure would certainly be adopted.

It is believed in some well-informed quarters that this will be done in a day or two, to anticipate the impending discussion in the Reichstag, which was adjourned until its next sitting, about the middle of January, when the opponents of prohibition will undoubtedly make a strong showing against both the policy and the legality of the measure.

There is considerable feeling on the part of the opponents of prohibition in the Reichstag in view of this threatened snap judgment, and a leading member of that body characterized it to me as "a mean trick."

The pretense of sanitary reasons is becoming the thinnest veil, which has been torn into shreds, and which is now apparently only insisted on as an excuse to the United States. The Berliner Tribune, a powerful organ of the Progressists, clearly showed in an article published on Saturday, the 30th ultimo, that it appears from official reports that from 1877 to 1879 there was an average of thirty-three deaths from trichinosis, and that the average has increased since then; and yet it asserts there has not proved to be one case of death, or even disease, from eating American pork.

On the other hand it is shown that the methods of preparing export

meat in the United States are absolute death to trichina. It says that in every case of death from eating of pork it has been from the use of freshly slaughtered German, Russian, or Hungarian pork. It holds that the American assertion that diseased meat is never exported from our country is maintained, and such meat is too rapid in decomposition to be prepared for export. In a word, as it shows, there is no sanitary objection to American pork. It gives the true explanation of the agitation by saying that it is a thorn in the flesh of German proprietors that a pound of American pork can be sold here for ten pfennig less than the home product.

If the move of keeping out the half a million cwts. of American pork, imported into Germany yearly, could succeed, then their greatest rival is out of the way, and they will fix prices to suit themselves.

Of course, if the public is not to be benefited, the great landholders are.

If the price of pork rises 5 pfennig per pound, a hog of 300 pounds gains 15 marks in value on present prices, and the result is that the large farmers who slaughter yearly from 500 to 1,000 head have a gain of 7,500 to 15,000 marks.

It is no wonder that the hog-raiser works in the interest of his pocket-book against the importation of American meat. "But woe to the poor, who pay to him the 15,000 marks! Woe to the hungry, who imagine that it is a duty of the government not to make the means of living exorbitant!"

The falsity of the pretense of sanitary reasons, and the real motives, are here clearly exhibited, directly under the eyes of the council.

A similar showing is made in yesterday's National Zeitung. Both papers show that the present is, above all, an improper time for such a measure. There exists no reason for helping German agriculturists, for this year's harvest has been remarkably abundant, while American crops have fallen off, and consequently American exports to Germany, leaving the German farmers a nearly clear field and good prices; and these conditions cannot be changed until the harvest of 1883.

But Europe needs American agricultural products, for it cannot feed itself, but must pay for these with its labor.

It is also pointed out that Germany is likely to be a great gainer by the proposed reduction of the American tariff.

The Americans cannot be convinced that the meat which they freely eat without injury is unwholesome, or that the measure is not a selfish, injurious blow at their interests. The danger of reprisals is pointed out; and it is suggestively stated by the Tribune that because the French have been buying railroad supplies of Austria instead of Germany, probably getting them cheaper, a mere private corporation business, not involving governmental action, the German press have been clamorous for reprisals by overtaxing champagnes.

If the action of a few Frenchmen can raise such stormy calls for reprisals, what will the Americans think on seeing their pork prohibited while Russian pork is allowed to come in?

The Tribune sees in this measure new powder for the guns of the Social Democrats, and deprecates the adoption of a measure where the gains must be so little, and the damage is certain to be so great.

I have given the substance of these newspaper articles, that you may see there is no lack of light shed on the subject.

I have sought by every means to oppose the measure, and have lost no opportunity to expose its true character and to show that the health of American swine is unimpaired, and American swine products are en-

tirely wholesome. I do not think these later propositions are now seriously disputed by people of intelligence. The movement is merely selfish, and in disregard of the interests of the United States. The only argument which would be effective against the measure would be the fear of reprisals. We could not insist upon any people receiving from us articles deleterious to health, but we can as little submit to the exclusion of our products upon false pretenses—pretenses so obviously false as in this instance.

A. A. SARGENT.

LEGATION OF THE UNITED STATES,
Berlin, January 1, 1883.

AMERICAN PORK IN GERMANY.

REPORT BY CONSUL BAILEY, OF HAMBURG.

I have the honor herewith to transmit a translation of the leading editorial in the Hamburger Handelsblatt of November 10, 1882, together with the original.

The Handelsblatt is the chief commercial paper of Hamburg, and the article is from the well-known pen of its efficient and impartial editor, Mr. Franz Rosatzin.

For some time past there has been much discussion throughout Germany, and especially at the centers of commercial business, concerning the importation of pork and hams from the United States.

As is well known, the people here do not eat as much meat of any kind as in the United States, chiefly on account of the high prices demanded for such articles.

The newspapers throughout the empire have, from time to time, called the attention of their readers to the great danger (as they regarded it) to health and life in eating American pork and hams. Many educated and intelligent men have also promulgated the same notions, and now go where you may, and converse with whom you please, you will generally find a wide-spread prejudice against this American article of consumption on account of the suspected trichina. Of course there is no real foundation for all this fear and talk, but that it largely exists is indisputable.

It is also well known here to some, but not to the masses, that American pork and hams are imported, and afterwards branded and sold as domestic meats, thereby enabling sales to be made at higher prices.

I have yet to learn of any deleterious effects or fatal cases arising from eating our pork and ham, but every American in Europe knows perfectly well the almost universal bias that exists here against all American productions, and our exports to Germany would be almost stayed were we not able to successfully compete in prices and superiority of article and manufactures.

If the proposed legislation is enacted, and the gate is shut against our pork, hams, and lard, I may venture the opinion that the people of Germany will soon realize the enhanced cost of living, and that the race is not essentially healthier and stronger for such exclusion.

J. M. BAILEY,
Consul.

UNITED STATES CONSULATE,
Hamburg, November 20, 1882.

[Editorial from the Handelsblatt.]

HAMBURG, *November* 10.

According to information received from various sources, an imperial decree has been, or soon will be, submitted to the Federal Council, respecting the *prohibition of the importation of American swine, pork, and sausages.* Concerning the latter article, the said ordinance would be but a repetition of a former law, prohibiting the importation of American sausages and chopped pork. This measure must be regarded as a very just one, on account of the difficulty of examination. The case stands different, however, as regards the prohibition of the importation of American swine and pork; as, according to our conviction, the same would prove an entire miss. The fact of this food, on account of its cheapness, having been extensively introduced with our population, has for a long time been displeasing to the representatives of agrarian interests, and the latter have chiefly originated the agitation. The advantage of cheapness, rendering it possible to the poorer classes to partake of meat in quantities heretofore not known to them, cannot be disputed; hence only the endangering of health can be asserted.

The importation of live swine from the United States is not very considerable. In the first nine months of the current year, 837,455 swine were imported into Germany, of which 477,921 came from Russia, 242,571 from Austria-Hungary, 72,243 via Hamburg-Altona, and 319 via Bremen. The importation of live animals from the United States to England, which has assumed such vast dimensions, is as yet inconsiderable to Germany, but will in the course of time no doubt increase. The number of swine imported from countries outside the customs union, comprises, most likely, chiefly Danish swine, and not many from America; at any rate, the number imported from the latter country is very small in proportion to the total imports. American swine products imported into Germany, and chiefly via Hamburg, consist of lard, bacon, and hams. Lard is for the present not to be affected by the said prohibition.

Respecting the reasons for the prohibition of the importation of chopped meat, which came into force June 25, 1880, the following was officially stated:

"As to the importation of whole swine or of large pieces of pork, such as hams and sides of bacon, the requisite protection has been already established by the existing regulations on miscroscopic examination of pork, or the protection may be established without great difficulty by completing and more rigidly enforcing the said regulations."

The present ordinance, however, goes much further, and deems that protection insufficient, which at that time was acknowledged to answer the purpose, although in the mean time nothing has occurred that could justify the apprehensions recently raised.

The motives assigned for the prohibition, given in the debates of the Imperial Diet, on the abolition of the duty on lard, and also at present assigned therefor, are as follows:

As an example we quote an editorial of the Neue Preuss Zeitung (New Prussian Gazette):

"The examinations instituted by the imperial board of health have proved that the importation of American pork in the various forms is attended by not inconsiderable danger. It has been proved that in America a plague is ravaging among the swine, called 'hog cholera,' which kills every year thousands of these animals. The owners of the same do not hesitate, however, to realize the deceased hogs. They make a 'schmeer' (animal fat) of them, of which two kinds are brought into trade, a dark and a light colored kind; the latter, as is reported, is to be imported also into Germany. It is known that France has long ago passed a law prohibiting the importation of American pork," &c.

The first sentence is worded in such general terms that the reporting of special cases must be awaited in order to enter at all upon and answer the allegation contained in the same. What does the phrase "not inconsiderable danger" mean? The eating of green fruit is likewise attended by not inconsiderable danger; is the eating of fruit therefore to be prohibited? If fruit is eaten when it is ripe, and pork when cooked, the same will not be detrimental to health.

It is further asserted that hog-cholera has appeared in America. This assertion is correct. As hogs are kept and fed in open fields, and hence are exposed to the inclemencies of the weather, thousands of them perish every year from the cold. This is, however, chiefly the case with young animals, the pigs, while the older ones, the hogs, generally escape the said disease. A memorial of the representatives of the Liverpool provision trade, addressed to Earl Spencer, lord-president of the Privy Council, dated May, 1881, remarks in this connection:

"All descriptions of hog diseases are usually classified in the West under the name 'cholera.' Principally young hogs are killed by the same. The average weight of the latter in Illinois was reported last year as being 104 pounds, while the average

weight of hogs brought into the market, and which are killed for human food, is about 260 pounds. There is hardly a remote possibility that the meat of any swine taken sick in the said manner can find its way to England as food in any form."

In case it be intended, however, to derive from hog-cholera a ground for the prohibition, such interference should have taken place at a much earlier period. In 1876, in the State of Illinois, 17 per cent. of the entire stock died from disease; in 1880 only 7 per cent., viz, 227,259 deaths of the total stock of 3,133,557 heads of swine. The Americans have learned to take precautionary measures. This whole industry is comparatively so young that it can still learn to avoid mistakes before committing them.

The complaint now made is that the owners do not hesitate to realize the deceased animals. In May, last year, an official report was published at Washington, addressed to the Secretary of State, Mr. Blaine; the same was made by a committee of inquiry at the instigation of Mr. Blaine, and treated on all the said relations. The said report was entitled "American Pork—result of an investigation made under authority of the Department of State of the United States." The following sentence, amongst others, is contained in this pamphlet:

"It can be proved, in fact, beyond doubt, that all rumors and reports to the effect that American swine, killed by disease or even by accident, ever come into the market, either in the form of meat or lard, are entirely founded upon malice and ignorance; as it is not in the power of the pork-pickler or lard refiner, whatever may be his inclination, to use the meat of swine killed by cholera, in any eatable form which could escape the slightest examination."

These assertions require no proof for those who are acquainted with the manner in which the deceased animals are treated. In the first place, the diseased animal undergoes such changes in appearance and flesh by emaciation and discoloration, that it is absolutely useless for human food. Furthermore, all dead swine found amongst the shipments ariving at the vast stock-yards are taken posession of by companies licensed for that purpose (as, for instance, the Union Rendering Company in Chicago). These companies boil the deceased swine into "grease," the smell of which alone excludes the application of the same to any other but industrial purposes. The "N. Pr. Ztg." (New Prussian Gazette) now says: "From the deceased animals a 'schmeer' is made, of which two kinds come into trade, a black and a light colored kind; the latter, as is reported, is to be imported also into Germany."

Here are at once several palpable mistakes or proofs of ignorance. Above all, the translation of "grease" by the term "schmeer" is wrong; it produces the appearance as if relating to eatable produce. The correct translation is "schmiere" (grease), or perhaps cart-grease, or something similar. There are two kinds made, "white" and "brown grease," and these designations are branded on the barrels; both kinds are used in the manufacture of soap and cart-grease. To our knowledge, the same are not imported into Germany; at any rate, nowhere a simpleton will be found who could be persuaded to buy the same for food, unless he be entirely devoid of the sense of smelling. The whole said imputation is, therefore, with well-known precaution clothed in the words "as is reported," &c.

The prohibition would also affect the so-called "prime and mess pork," corned or pickled pork in barrels, which is chiefly used in supplying our vessels. A prohibition of this article of provisions, which is imported in considerable quantities, is, however, quite unwarranted, for the reason that it is not eaten raw, but only in a cooked state, and hence the danger of trichinosis is excluded.

The official report, frequently referred to, mentions the fact that for a number of years the Berkshire stock has been imported from England to Illinois, Chio, and other Western States for the improvement of the breeds. The said report draws the following conclusions:

"American swine are of the best and purest breed and are fed on Indian corn for the market, which is not the case with swine of other countries. The percentage of American swine infected with trichina is, in all probability, in consideration of their superiority of breed and feeding, much smaller than that of swine of any other country.

"The swine products exported in 1880 from the United States aggregated 1,326,157,330 pounds (value $100,800,000), of which 700,000,000 pounds was shipped to England, *i. e.* 20 pounds per head of the English population, a quantity not near consumed in Germany, but which in both countries falls upon the middle and working classes.* In England nobody thinks of preventing the importation of this article of food, although from time to time agitations appear against the same, least of all the government."

* Westphalian and Oldenburg hams now sell at from 105 to 110 pfennige per pound; American, from 84 to 86 pfennige; German lard, from 65 to 66 marks; American, from 62 to 63 marks per cwt.

AMERICAN PROVISION TRADE IN LEITH.

REPORT BY CONSUL LEONARD.

During the last summer and autumn the imports of American hog and dairy produce have been limited by the small available supply and the consequent high prices.

The quality of all hog products has been a full average, except that there has been a slight tendency to saltness, caused by anxiety to avoid taint, of which there has been very little.

Lard has been in fair consumptive demand, and the season closes with no stocks.

If values only decline to an average there will be a large and steady demand for all hog products throughout the ensuing winter.

There are still complaints of goods delayed in transit so long as to be much deteriorated in quality when received here.

The very low prices at which American pork has been delivered has of late years caused Scotch farmers to give up pig raising for the market, but this year they have again turned their attention to it, and so have to a considerable extent supplied the want caused by deficient importations from abroad. Their meat is much liked, and has been delivered at an average price of 56*s*. ($13.63) per 112 pounds, dead weight. It is probable that farmers will in future give this subject more of their attention than they have hitherto done. The meat is cured without ice, and is corned; that is, it lies only four days in salt, so that it has to be consumed within two or three weeks after it leaves the curing-house. It is put up chiefly in the form of skinned rolls.

There are one or two experiments now being made in feeding hogs in the American manner.

Owing to the abundant production of butter, not only throughout the country here, but also in Ireland and on the continent of Europe, it had a depressing influence on business generally this season, and, as prices were comparatively moderate, the falling off in the imports of American butter had no appreciable influence on the market here. A very limited trade therefore has been done this year from the United States by reason of the prices in New York and other places of shipment being too high to admit of any profit being made on importations.

Creameries were all along too dear, and could not compete with the shipments of estate butter from Denmark, Sweden, and Germany. This may also be said of New York State butter, which was displaced by the finer qualities of Danish and Swedish factory butter.

Ladle packs touched a price in September upon which there was a slight margin, but since then the reduction in the price of butterine from Holland and other parts of Europe has completely stopped the sale of such, even at a considerable loss on the cost price.

Butterine from the continent of Europe having improved so materially in quality is superseding to a large extent the sale of all secondary kinds of butter from America as well as from the European continent.

Choice qualities of Danish estate are very scarce at present, and there is every likelihood of such realizing high prices during the winter and the early spring.

The large make of cheese in this country checked the sale of American, and as a rule the importations of finest qualities from New York this season have left very little profit. Secondary kinds paid a fair but not a large margin.

Scotch and English farmers are now giving much more attention to

dairy produce, and at the present high prices they compete successfully with American producers and those of the European continent.

The sale of canned goods during the year has been fairly good. The public are becoming more educated in regard to them, and the use of such goods is more general.

The sale of compressed corn beef has not, however, been maintained. Consumers have concluded that the nourishing properties of that article are small, in consequence of the process adopted in canning it, and have shown a preference for bacon, salmon and other articles, which compare more favorably in price and in nutritive value.

Canners of salmon on the Pacific coast have erred in not exercising sufficient care in the selection of sound fish, and in canning them in proper condition, and the result has been that many thousands of cases of salmon, mostly from the Fraser River, which were sold to arrive at 24*s.* ($5.84) to 25*s.* ($6.08) at Liverpool, with a guarantee of good quality, were rejected on arrival, and subsequently resold at 21*s.* ($5.11) to 22*s.* ($5.35) per case.

Packers do not seem sufficiently to recognize the fact that canned goods must be of irreproachable quality, and any that are not so tend to depreciate these goods in this country, and ruin the sale of the article.

Were canners to send only such goods as are of irreproachable quality they would get better prices, and maintain a trade which they will otherwise lose.

Lobsters have not improved in quality. The pack of 1882 is on the whole poor; and a really fine can of lobster, such as could be had four years ago, is a rarity. In this, again, packers are following a losing policy. What is wanted here is quality, not quantity; and if a packer will give a thousand cases of fine goods, he can get for them 22*s.* ($5.35) per case of forty-eight one-pound tall tins, which will yield him a profit, instead of sending over two thousand cases which are dear at 18*s.* 6*d.* ($4.50), and which yield him neither profit nor credit.

Fine goods in this country always command a sale. The market is flooded with inferior qualities, which do no credit either to the packer or to the merchants who buy them, and who regret ever after having done so.

Pacific fruits have made their way, and have commanded much better prices than States pack. While No. 3 cans of States peaches sell for 7*s.* 6*d.* ($1.82) to 8*s.* 6*d.* ($2.07) per dozen, cans of Pacific fruit are more easily salable at 11*s.* 6*d.* ($2.80) to 12*s.* ($2.92) per dozen. At the same time there have been complaints of these which are not unfounded, and which show that Pacific packers must look to quality if they wish to retain their position in this market.

In such respect I deprecate the system of consigning goods which result in loss to consignees. The market has been flooded with Pacific canned fruits, which in many cases, in consequence, have been sold below their value to command a market.

Packers of these and other articles almost invariably ship their season's pack as soon as it is ready, and the result of a large quantity coming at once on the market is a serious fall in price, while if they were to send shipments at intervals sufficient to keep the market supplied they would get better prices.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, November 15, 1882.

AMERICAN BACON, LARD, AND TALLOW IN HOLLAND.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

BACON.

The imports of American bacon at Amsterdam during the period of time covered by this report (1882) are estimated to have been 3,000,000 pounds, as against 4,000,000 pounds imported during the calendar year of 1881. This quantity, however, does not represent the total shipment of the article to this port, but only that portion of it which entered into this city's and the inland trade. Shipments of the article to this port consigned to Rotterdam houses and elsewhere for transshipment, are not included in the above-stated quantity.

The recent decline in the trade is, as I am informed, altogether ascribed to high prices for bacon, as they have ruled for some months past in the United States.

I am assured that the undue agitation of the American pork or trichina question on the Continent a year or 18 months ago, and the manner in which at that time official publicity was given here of the discovery of trichina in a very few instances, would no longer have the slightest effect on the local demand or market, and that the same is sure largely to increase again as soon as the prices get lower.

The trade in "short middles" has been almost totally abandoned since April last, and only "long backs" of some of the preferred marks found purchasers.

Speculative transactions on delivery occurred, and the trade, what there was of it, took throughout the year a very regular course, being as a rule confined to and in the hands of first-class and trustworthy houses, both as refers to packers and exporters in the United States and importers here.

As represented to me, the imports are more likely still further to fall off than to increase, so long as present prices (June, 1882) are maintained, as they render competition with the inland product impossible, and also tend to increase the breeding of pigs in the provinces to a very great extent.

Prices for 25 pounds long backs of first rate brands rose slowly from 62 florins per 100 kilograms, in the early part of July, 1881, to 67 florins at the end of September, and then gradually fell to 60 florins at the close of November, which price was maintained with very little fluctuation until the beginning of April, 1882, since which period another rise occurred, and still the tendency is upward.

At the close of June, 74 florins were paid (in entrepot), the duty amounting to 1 florin per 100 kilograms.

HAMS.

The imports and dealings in American hams have never attained any importance in the markets of this country.

The quantity received at this port and at Rotterdam during the year ended December 31, 1881, was estimated to have amounted to about 300,000 pounds; but there has been so very little doing in the article during the first six months of the current year, and principally on account of the high prices of the same, that nothing remains of sufficient importance regarding the article deserving to be noted here.

LARD.

The imports of lard at Amsterdam and Rotterdam, said to have amounted to over 5,000,000 pounds during the year ending December 31, 1881, would undoubtedly have largely increased since but for the pressure of high prices.

The brand "Wilcox," formerly almost the only one in constant demand here, has lost much ground through the persistent competition of other first-rate qualities, whilst offers at reasonable prices of somewhat watered lard were readily accepted. Owing to the high prices of other sorts transactions in the better qualities have, to a certain extent, been undermined.

The great inland production of natural and artificial butter is likely always to prevent the markets of this country becoming of much importance, so far as lard imports intended for home consumption are concerned.

In general the prices of the article follow, but very reluctantly, the rising movement in the American market.

In most cases the effects of an occasional slight decline in prices at New York were overestimated, and holders here hastened to realize at the very smallest profits.

Prices fluctuated from 34 florins early in July, 1881, to about 37 florins in the middle of October, then fell to thirty florins early in March, 1882, and have since risen to about 36 florins at the end of June; all per 50 kilograms, with the original reduced tare. This article pays no import duty here.

TALLOW.

There are in Holland three stearine candle factories, located at Amsterdam, Schiedam, and Gouda, which together work up about 20,000,000 kilograms of raw material per annum. This raw material consists of tallow to the extent of one-third to one-half, and as to the remainder, of palm oil.

The supplies of tallow are brought here from Buenos Ayres, Melbourne and Sidney, and from the United States.

The imports as to quantity from the United States are said to be entirely depending on the prices, and are generally quite large when the prices for the article are low enough, and *vice versa* when too high.

It seems to be the impression on the part of parties here interested in this trade that a very large proportion of the best and better qualities of tallow has been for several years past, and is now, used in the United States in the manufacture of oleomargarine, reducing not only the stock of tallow, but also very much the quality of what remains for export.

Prime city and prime western tallow is what is principally required, and is usually imported from New York; other sorts, softer and of a generally poorer quality, are also imported from Boston and Saint Louis.

In former years there arrived here from the United States occasional shipments of an article known in the trade here as oleomargarine stearine, considered a most valuable product for use in stearine candle factories, but the price for same has more recently ruled altogether too high to admit of its being imported and used here.

The quantity of tallow imported into this country during the calendar year of 1881 is estimated at 4,000,000 pounds.

The Koninklyke Fabrick van Was Kaarsen (The Royal Wax Candle Factory of Amsterdam), established about fifty years, consumes about

7,000,000 kilograms of raw material per annum, of which one-third to one-half consists of tallow.

The factory produces large quantities of candles for export to European countries and to the colonies, and also turns out stearine and glycerine, &c.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, October 9, 1882.

AMERICAN PRODUCTS IN NEWFOUNDLAND.

REPORT BY CONSUL MOLLOY, OF SAINT JOHN'S.

I herewith beg to inclose a copy of imports from the United States into this colony for the year ending 31st December, 1881, together with value of imports from all countries for the years 1880, 1881, and the amount of revenue collected for both years.

Since my last report 33 miles of railroad have been completed and running daily with mails and passengers to Holyrood; from thence to Harbor Grace, a distance of 40 miles, is expected to be completed by middle of December. This Newfoundland railroad is being built by a company of New York capitalists, and a charter for a dry-dock 600 feet long, 90 feet wide, and 30 feet deep has also been secured by a party of Americans. J. A. Simpson & Co., of New York, are the contractors.

THOS. N. MOLLOY,
Consul.

UNITED STATES CONSULATE,
Saint John's, N. F., October 19, 1882.

Imports from the United States into Newfoundland during the year 1881.

Articles.	Quantity.	Value.
Ale, beer and porter ..... gallons..	2,042	$817
Articles for religious purposes	.....	190
Bacon and hams ..... cwt..	1,106	14,378
Beef and pigs' heads ..... barrels..	3,830	45,960
Biscuit ..... cwt..	19	76
Blocks	.....	257
Books, printed	.....	1,262
Bricks	.....	955
Bran	.....	1,672
Butter ..... cwt..	7,447¾	125,122
Cabinet ware	.....	1,450
Canned meats	.....	6,191
Fruits	.....	373
Canvas	.....	23,049
Candles	.....	1,643
Carriages and wagons	.....	315
Cheese ..... cwt..	43¼	606
Cigars ..... thousand .	12,000	176
Clocks and watches	.....	2,393
Coals ..... tons..	2,400	6,000
Coffee ..... pounds..	2,005	4,003
Confectionery ..... cwt..	18	432
Cordage	.....	5,411
Fancy biscuit	.....	1,212
Feathers ..... pounds..	49,802	4,980
Fishing tackle	.....	14,227
Do free of duty	.....	126

Imports from the United States into Newfoundland during the year 1881—Continued.

Articles.	Quantity.	Value.
Flour ..... barrels..	171,018	$855,090
Fruit, dried ..... do....	11,429	1,143
Other descriptions except apples	.....	287
Glassware	.....	6,419
Guns	.....	67
Hardware	.....	32,574
India-rubber ware	.....	1,840
Indian corn	.....	3,929
Meal ..... barrels..	6,849	22,259
Iron, bar, sheet, &c	.....	1,933
Lard	.....	3,295
Leather	.....	7,910
Leatherware	.....	20,427
Lumber ..... thousand feet..	116	1,163
Machinery	.....	6,332
Masts and spars	.....	152
Medicine	.....	2,474
Miscellaneous	.....	20,783
Miscellaneous free of duty	.....	974
Molasses ..... galls..	25,596	9,726
Nails	.....	1,859
Oils, viz:		
Linseed	.....	237
Kerosene ..... galls..	366,694	58,671
Paints	.....	3,958
Paper, manufactured	.....	4,920
Pease ..... bales..	17	68
Pitch and tar	.....	6,010
Plate and jewelry	.....	321
Pork	25,040	375,600
Potatoes ..... bushels..	1,066	9,764
Ready-made clothing	.....	3,600
Rice	.....	61
Salt ..... tons..	2	8
Soap	.....	9,403
Spirits, viz. rum ..... galls..	8,680	36,134
Staves, undressed	.....	1,679
Stoneware	.....	1,177
Sugar:		
Refined ..... cwt..	1,405¾	14,059
Unrefined ..... do ..	77¾	544
Tallow	.....	5,364
Tea ..... pounds..	16,203	4,051
Tobacco ..... do ..	22,273	4,455
Leaf ..... do ..	377,430	37,743
Turpentine and varnish	.....	2,454
Vegetables ..... bushels..	.....	231
Vinegar ..... galls..	1,233½	247
Woodware	.....	13,876
Woolens and cottons	.....	28,522
Total for the United States	.....	1,938,169

Amount of imports from all countries 1880	$2,431,683 12
Yielding a revenue of	857,931 21
Amount of imports from all other countries 1881	2,751,377 24
Yielding a revenue of	952,410 83

TRADE OF BAY ISLANDS WITH THE UNITED STATES.

REPORT BY CONSUL BURCHARD, OF RUATAN AND TRUXILLO.

The principal trade of the Bay Islands is with the United States. The only competition is a contraband traffic with the neighboring port of Belize, in British Honduras, which, I regret to say, seems to be increasing. The exceedingly high duties on imports makes smuggling very profitable, while the proximity of the English market above mentioned, the facility of reaching it with small crafts, and the existtence of many secluded harbors, cays, and inlets in unguarded parts of the islands render this illicit traffic quite safe and easy The prac-

tice of the smugglers is to land their goods at night in out-of-the-way places with which they are familiar. The next day they sail into this port and make an entry at the custom-house of a few articles upon which little or no duty is levied. The law imposes very severe penalties for smuggling, such as confiscation of the vessel and cargo, and imprisonment from one to five years of the principals and participators in the offense; but the profits are so large and the risk of being caught and convicted comparatively so small that the penalties do not intimidate men of ordinary courage. This contraband traffic is a very serious drawback to legitimate commerce. Some traders, dealing exclusively in American merchandise, have been compelled to suspend business during the past year, simply because they could not pay an import duty, which, on a general assortment, amounts fully to 60 per cent. of the invoice prices, and then compete with English goods smuggled in from an English market. The case is more aggravating, from the fact that all the money employed in this clandestine trade is brought here directly from the United States to purchase the products of the islands by vessels which ought to bring merchandise instead of cash. Our country buys everything which is produced here for export, and we ought to and would supply the inhabitants with all the foreign merchandise they require if the contraband trade with Belize could be stopped. This evil, which is alike prejudicial to American trade and to the public revenue of Honduras, has been fully represented to the government, and it is confidently expected that a remedy will soon be found and adopted. It is reported that President Soto is about to issue a decree prohibiting vessels of less than 25 tons owned in the republic from engaging in foreign (*i. e*, Belize) trade. This would give a death-blow to smuggling, as vessels of a larger tonnage are well known to the revenue officers; their movements could be easily watched, and any attempt to land goods clandestinely would almost surely lead to detection and forfeiture Only crafts of from 3 to 8 tons can be employed safely and profitably in the contraband trade with Belize. Notwithstanding the drawbacks above mentioned, American trade in American merchandise is steadily gaining ground, not only in the Bay Islands, but in all parts of this consular district. Within the past two years quite a number of stores, stocked entirely with American produce and fabrics, have been opened in the ports of Truxillo, Omoa, and Puerto Cortez on the mainland, where the merchants from the interior procure their supplies. These experiments have all been successful. They were commenced in a very modest way without much capital, but have grown rapidly in strength and popularity, until now they can defy competition. Formerly at least 95 per cent. of all the dry goods introduced into the above-named ports came from Europe. To-day fully 50 per cent. of the dry goods and 90 per cent. of everything else come from the United States.

The signs of the times all indicate that the day is fast approaching when our country will absorb the trade of this republic. The superiority of American cotton fabrics is now fully recognized, not only in these islands, but also on the coast and in the interior. The women will have American prints, muslins, lawns, sheetings, &c., although they cost a little more than the English, and the men who have used our shirtings, brown drills, cottonades, &c., are all enthusiastic in favor of *la ropa Americana*. Since the employment of steam vessels in the fruit trade with these islands and the neighboring coast, the natives have gradually been made to understand and appreciate the advantages of quick returns. At present we have semi-monthly mails between the United States and all of the Atlantic ports of Honduras. The orders for Ameri-

can goods by these steamships are constantly increasing. Besides, some interior merchants, who have always done their business with old established English houses at Truxillo and Puerto Cortez, after mature deliberation, have lately mustered sufficient courage to enable them to visit the principal cities of the United States. They have all returned, not only with well assorted invoices of American goods, but full of admiration and enthusiasm for the great "república del norte." The example of these daring pioneers, as their friends regard them, will be followed by others, until a trip to the "States," either for business or pleasure, will finally become a common occurrence. The physical, political, social, and commercial aspects of the United States, our railroads, hotels, amusements, &c., are popular themes for conversation in the best social circles of the interior. The few who can speak on those subjects from personal observation and experience are regarded as "traveled gentlemen," and entitled to special consideration.

Another favorable sign of future commercial and friendly relations between this country and the United States is found in the fact that several young Hondurauians belonging to excellent families are now being educated in American colleges. The cities of Tegucigalpa, Comayagua, Juticalpa, Truxillo, and I believe some others, are represented by students in the United States. In the month of August last two of these young gentlemen returned to Honduras, one with the title of M. D. from a New York university, and the other with a diploma from the commercial department of the same institution. The last brought with him a fine assortment of merchandise for the interior trade. Both are married to American ladies, who accompanied their husbands to this country. These ladies are natives of New York, and fair representatives of the Empire State in appearance, refinement, and intelligence. After visiting these islands, they went to Truxillo, and from there were conveyed on the backs of mules over the mountains to their future homes in the rich and romantic province of Olancho. They may claim the honor of being pioneers of our countrywomen to one of the most charming regions of the American continent—a fertile and picturesque valley about midway between the two oceans, inclosed by lofty mountains full of mineral wealth, and drained by the gold bearing Guayape (Wy-áh-pay). They will create a sensation, if not a social revolution, in that highly-favored but primitive community. The wives and daughters of the wealthy Olanchonians will be initiated into the mysteries of our metropolitan tastes and fashions, and very likely they will receive secret lessons and modern ideas on the subject of "woman's rights" of which, at present, they have only the most antiquated notions, so antiquated that the wives actually obey their husbands, and think it perfectly natural and proper to do so, while the single daughters are not allowed to go out with young gentlemen, or to receive their visits, except in the presence of the mother, a married sister, or some ancient virgin, who watches them with feline vigilance.

EXPORTS.

The exports from this consular district consist of cattle, mahogany, Spanish cedar, fustic, Brazil wood, hides, deer-skins, India rubber, sarsaparilla, cocoanuts, bananas, plantains, oranges, limes, pine-apples, mangoes, and some gold and silver bullion. The cattle are shipped to the island of Cuba, and a few to British Honduras. The price of steers four years old, delivered at Truxillo, ranges from $15 to $20 per head. The government exacts an export duty of $3 on each animal; about 25,000

are exported annually. The larger part of the mahogany is sent to England. The United States receives all of the other exports. The Bay Islands export cocoanuts and fruit only. Since the 1st of January last, 3,180,000 cocoanuts have been exported to the United States. The average price is about $25 per M. The demand is greatest from August to November, when vessels are sent out expressly for them from New York and Philadelphia. The average price of bananas for the past year has been 37½ cents per bunch; of plantains $6.50 per M; oranges, $5 per M; limes, $2 per barrel; pine-apples, 75 cents per dozen; and mangoes, $2.50 per barrel. The total value of the cocoanuts and fruit exported from this district since the 1st of January, without including Puerto Cortez, will amount to about $250,000.

NAVIGATION.

During the present year the Bay Islands (Ruatan, Utilla, and Bonacca) have received 94 arrivals of American vessels, with an aggregate of 14,618 tons, from different ports of the United States; 29 of the said arrivals were steamers. During the same period there have been 26 arrivals of vessels under the flags of other nationalities, employed in the fruit trade, and partly owned in the United States. The above embraces the total of arrivals and departures, with the exception of a few small crafts owned in the islands, and engaged in trade with Belize and the Mosquito coast.

WILLIAM C. BURCHARD,
Consul.

UNITED STATES CONSULATE,
Ruatan and Truxillo, December 1, 1882.

HONDURAS IMPORT DUTIES.

REPORT BY CONSUL BURCHARD, OF RUATAN AND TRUXILLO.

The tariff of Honduras divides merchandise into ten classes, and imposes a duty on the gross weight of each bale, barrel, package, &c., at a fixed rate per pound, which rate ranges from 3 cents to $1.50.

The following table contains all of the principal articles of merchandise imported from the United States, divided into their respective classes, with the duty corresponding to each.

First class, free.—Agricultural and mining machinery, steam-engines, saw-mills, lumber, shingles, iron and wood buildings, brick, lime, cement, coal, slate, zinc, and other materials for roofing; clocks for churches and towers, materials for railroad cars, pumps, printing-presses, type, paper, and other materals for printing; boats and lighters with their oars and sails, iron and lead pipes, wire for fences, live animals, barrels, pipes, and hogsheads, hoops and staves, gunny-bags, gold and silver bullion and coin, books, seeds and plants, fertilizers, rice, beans, flour, meal, corn, potatoes, and other vegetables; ice, personal baggage, and household effects of passengers and immigrants; articles introduced for the use of foreign ministers, for the president and members of his cabinet, and on account of the government.

Second class, duty 3 cents per pound.—Hard bread and crackers; coffee, sugar, starch, molasses, honey, corn starch; beef, dried, smoked, or salted; pork, bacon; stoves, pots, and all cooking utensils made of iron;

axes, spades, shovels, picks, crowbars, chains, anchors; iron safes; letter-presses; nails, tacks; iron, steel, brass, copper, tin, and zinc, in bars-rods, or sheets; tar; mineral waters, ginger ale; kerosene and all other oils or fluids for light; common soap; crockery; blank books, pens, pencils, ink; coffee and corn mills; grindstones; paints; epsom and glauber salts; tallow; sole leather; glassware; vinegar.

Third class, 8 cents per pound.—All articles made of iron, steel, tin, brass, or zinc, not specified in other classes; linseed, cod-liver, and almond oils; nuts and dried fruits; spices; lamps, lanterns, chandeliers, chimneys, globes, candlesticks, &c., not plated or gilded; billiard tables, pianos, organs, chairs, sofas, tables, and furniture of all kinds made of wood; paper, either for writing or wrapping; fish, salted, smoked, or dried; wines of all kinds; sperm candles; carpets made of cotton or mixed with wool; mattresses; mirrors; matches; preserved fruits and jellies; tools for carpenters, blacksmiths, and other trades; hams; china and porcelain wares; sails for vessels, rope, and cordage.

Fourth class, duty 16 cents per pound.—Brandy, rum, gin, and other spirits; perfumed soaps and oils; perfumed waters for the toilet; sheetings, shirtings, brown and colored drills, duck and all other cotton fabrics, except prints, lawns, muslins, and other dress goods; cotton and linen thread; rubber and gutta-percha goods; surgical, mathematical, and musical instruments; toys, baby carriages, baskets, trunks, valises, carpet-bags, needles, pins, fish-hooks, buckles; thimbles, except gold or silver; knives with wood handles; brooms, wooden buckets.

Fifth class, duty 24 cents per pound.—Ready-made clothing; socks, caps, gloves, and all other knit goods made of cotton; buttons of all kinds, except silk, pearl, gold, and silver; penknives, razors, scissors, knives and forks, sheath knives; linen and mixed drills, tablecloths, towels, napkins; artificial fireworks; canes, whips; umbrellas, parasols of cotton or wool; tanned skins, leather; tea; brushes; photographic instruments and materials.

Sixth class, duty 28 cents per pound.—Drugs, medicines, and chemical preparations; all plated and gilded goods; ready-made ladies' clothing and underwear of cotton; cotton handkerchiefs; essences and extracts; tape, lace, edging, Hamburg, &c., of cotton; wool blankets; clocks; linen shirtings; prints, calicoes, ginghams, and other similar cotton fabrics; nautical instruments.

Seventh class, duty 36 cents per pound.—Woolen or mixed fabrics, such as table covers, stockings, gloves, caps, half hose, &c.; cotton shirts, lawns, piqué, percales, cambrics, linen hosiery.

Eighth class, duty 50 cents per pound.—Fans, except with ivory handles; spectacles, opera glasses, telescopes; boots and shoes of all kinds; linen shirts; clothing made of wool or linen; knives and forks, plated or gilded; corsets, suspenders, elastics; violin and guitar strings; swords, daggers, pistols, revolvers, fowling pieces, cartridges; caps, felt and straw hats for men or women; umbrellas, parasols, of pure silk or mixed; broadcloth, cassimere, merino; muslin; flannel, and all fabrics of pure wool or mixed with cotton, not specified in the other classes; saddles.

Ninth class, duty 80 cents per pound.—Clerical and church ornaments; cigarettes; artificial flowers; laces, ribbons, cords, stockings, gloves, &c., made of pure linen or mixed; linen dress goods; woolen shawls and shirts; fur, silk, and Panama hats; neckties of cotton, linen, or wool; curtains and mosquito bars of cotton or linen.

Tenth class, duty $1.50 per pound.—Fans with ivory handles; ornaments and net work for the head; billiard balls; human hair and its

imitations; kid gloves; jewelry, and watches of all kinds; silk goods, goods made of silk mixed with cotton or linen, not specified in other classes.

The following articles are prohibited, unless introduced for the use of the government, viz: Gunpowder, except for mining purposes; muskets, rifles, cannons, and other munitions of war; cigars and tobacco.

The duties are collected on the gross weight of all packages of merchandise. No tare is allowed for boxes, barrels, crates, &c. It sometimes happens that the duty on a box amounts to more than that of its contents. Mr. William Melhado, the British consul for Truxillo and the Bay Islands, recently called my attention to a pile of empty boxes, barrels, and crates in his back yard, upon which he assured me that over $3,000 had been paid to the custom-house for duties.

To the total amount of duties by weight, according to the preceding tariff, the following extras are added, viz:

First. For public roads, 2 per cent.

Second. For the university fund, 2 per cent.

Third. For the hospital fund, 2 per cent.

Fourth. For the funded debt, 10 per cent.

Finally, the importer has to pay 50 cents per 100 pounds on the gross weight of his merchandise for storage, whether he uses the government's warehouse or not.

Tonnage dues and port charges.—Vessels of 100 tons or less pay 50 cents per ton; vessels of 100 to 150 tons pay 37½ cents per ton; vessels of 150 tons and over pay 25 cents per ton. For light-house and buoys, 12 cents per ton extra.

Steamships engaged in the fruit trade are exempt from the payment of tonnage and light-house dues. The permit to discharge and receive cargo costs $2; anchorage, $1; clearance, $1.

WM. C. BURCHARD,
Consul.

UNITED STATES CONSULATE AT RUATAN AND TRUXILLO,
December 1, 1882.

FOREIGN TRADE OF JAMAICA.

REPORT BY CONSUL HOSKINSON, OF KINGSTON.

It is to be regretted that the only accurate and authentic information in reference to the imports and exports of Jamaica is to be found in the Annual Blue Book, which is not usually published until nearly a year after the close of the fiscal year. So that my present report, except so far as concerns the trade of my consular district, Kingston, with the United States, will close with the year ending September 30, 1881. I have applied to the authorities for the information which has been freely given to the Chamber of Commerce of this city, and been refused it.

The value of the imports into Jamaica during the financial year ending September 30, 1881, was $6,777,423.44, or about $400,000 less than in the previous year. The collector-general, in reviewing in his annual report the revenue transactions of the year 1880–'81, writes as follows:

While there has been a general decrease on all articles of luxury, the importations of the cheapest descriptions of farinaceous foods have largely increased. The cause of this result is, in my opinion, directly traceable to the cyclone of August, 1880, and to the lengthened drought which followed, the combined effects of which materially injured all descriptions of food crops, compelling the resort to foreign markets for the necessaries of subsistence.

The following tabulated statement shows the proportions in which the imports were drawn from the several countries during the five years ending on 30th September, 1881:

Country.	1876–'77.	1877–'78.	1878–'79.	1879–'80.	1880–'81.
United Kingdom	53.69	50.72	50.90	52.71	46.39
United States	29.18	31.54	31.40	32.14	39.47
Dominion of Canada	12.42	13.95	13.96	11.64	10.59
Other countries	4.71	3.79	3.51	3.51	3.55

There was a large decrease in the exports during the fiscal year 1880-'81, compared with the previous and three preceding years. The value of the exports in each of these years was as follows:

Year.	Produce of the colony.	British, foreign, and other colonial produce.	Total.
In 1876–'77	£1,419,625	£39,044	£1,458,669
In 1877–'78	1,175,145	35,559	1,210,704
In 1878–'79	1,262,869	94,702	1,357,571
In 1879–'80	1,427,144	85,834	1,512,978
In 1880–'81	1,104,406	74,187	1,178,594

The following table exhibits the principal items of increase and decrease in the exports of last year:

Increase.			Decrease.		
Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Annotto ..... pounds..	14,738	£468	Sugar ..... hogsheads..	11,061	£160,923
Cattle ..... head..	333	2,610	Rum ..... puncheons..	4,634	34,686
Limes ..... barrels..	217	33	Coffee ..... cwt..	3,061	23,338
Oranges ..... No..	9,016,720	8,395	Logwood ..... tons..	2,780	29,185
Pine-apples ..... dozen..	2,106	176	Pimento ..... cwt..	37,119	57,727
Lime juice ..... gallons..	36,832	2,612	Bananas ..... bunches..	223,050	15,891
Sheeps' wool ..... pounds..	3,923	52	Cocoanuts ..... number..	3,754,941	11,692
Walking sticks ..... bundles..	4,406	2,483	Cocoa ..... cwt..	2,606	9,043
Tamarinds ..... pounds..	397	9	Beeswax ..... do....	346	617
Cigars ..... do....	16,102	8,699	Ginger ..... do....	982	6,648
Tobacco leaf ..... do....	41,736	1,244	Honey ..... do....	730	805

The value of the principal staples exported bore the following percentage proportions to that of the entire exports: Sugar, 30.5; rum, 15.7; coffee, 20.9; logwood, 11.9; making 79 per cent. of the total of the exported produce of the island.

SHIPPING.

The total number of vessels entering and clearing the harbors of the island during the year ending 30th September, 1881, was 1,514, of 794,336 tons, being a decrease of 166 vessels and 2,610 tons on the previous year. Of the 1,514 vessels 911 were sailing vessels, having a gross tonnage of 187,194 tons, and 603 were steamers aggregating 607,142 tons, which, when compared with the previous year, show a decrease of

260 sailing vessels of 64,275 tons, and an increase of 94 steamers of 61,665 tons. American shipping shows a steady decline, both in sailing and steam vessels—the latter being small steamers engaged in the fruit trade with the north side of the island.

GEO. E. HOSKINSON,
Consul.

UNITED STATES CONSULATE,
Kingston, Jamaica, November 13, 1882.

Total foreign commerce of the colony of Jamaica for year ending September 30, 1881.

Countries.	Imports.	Exports.
United Kingdom	$3,144,012 41	$3,811,465 52
Dominion of Canada	717,205 34	357,444 24
United States	2,675,232 06	1,088,074 61
British West Indies	28,414 85	138,323 34
British East Indies	158,203 70	829 97
France	21,575 17	81,449 63
British Guiana	15,394 73	20,908 73
Germany	8,084 68	65,320 14
Foreign West Indies	4,240 45	72,235 10
Foreign States of America	4,548 66	53,919 80
Hayti	421 85	31,442 25
Gibraltar	89 54	.....
Austria	.....	9,248 78
Italy	.....	4,847 36
British Honduras	.....	120 36
Total	6,777,423 44	5,735,629 83

Details of the trade of Jamaica.

IMPORTS.

Whence.	Food stuffs.	Liquors.	Tobacco and cigars.	Household furniture.	Boots and shoes and clothing.	Hardware.
From United Kingdom	£82,265	£46,994	£445	£10,481	£305,918	£53,792
British Possessions	174,435	732	4	162	757	1,296
United States	416,368	722	11,245	2,779	5,042	9,231
Other countries	2,038	2,888	653	189	716	55
Total	675,106	51,336	12,347	13,611	312,433	64,374

Whence.	Lumber and building materials.	Estates, machinery, and supplies.	Machinery and tools.	Coals and coke.	Books and printed matter.	Miscellaneous.
From United Kingdom	£13,287	£37,259	£2,644	£13,473	£5,977	£73,519
British Possessions	8,723	522	171	4	8	2,076
United States	31,715	10,908	1,686	1,036	329	58,656
Other countries	53	66	18	.....	72	1,242
Total	53,778	48,755	4,519	14,513	6,386	135,492
Grand total imports	.....	.....	.....	.....	.....	1,392,668

Details of the trade of Jamaica—Continued.

EXPORTS.

Whither.	Sugar.		Rum.		Coffee.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Hhds.		*Pch's.*		*Cwts.*	
To United Kingdom	13,287	£212,595	12,760	£159,497	63,948	£168,311
British Possessions	3,860	61,760	200	2,501	5,841	15,372
United States	3,707	59,315	180	2,247	11,483	30,225
Other countries	202	3,231	812	10,161	6,639	17,475
Total	21,050	336,901	13,952	174,406	87,911	231,383

Whither.	Pimento.		Dyewoods.		Fruit.	Tobacco and cigars.
	Quantity.	Value.	Quantity.	Value.		
	Cwts.		*Tons.*			
To United Kingdom	39,463	£64,083	39,513	£117,860	£28	£12,313
British Possessions	36	58	277	712	535	1,437
United States	12,818	20,817	5,452	16,083	43,645	977
Other countries	1,176	2,885	2,226	6,641	7	1,685
Total	54,090	87,843	47,468	141,296	44,215	16,412

Whither.	Minor products.	Cattle.	Horses and mules.		Miscellaneous.
			Number.	Value.	
			Head.		
To United Kingdom	£27,694				£20,826
British Possessions	4,448		8	£395	19,146
United States	19,074				31,201
Other countries	2,680	£11,506	32	881	8,287
Total	53,896	11,506	40	1,276	79,460
Grand total exports					1,178,594

AMERICAN GOODS IN MAURITIUS.

REPORT BY CONSUL PRENTISS.

IMPORTS INTO MAURITIUS.

A report upon the market in this island for American goods must necessarily be more or less speculative, as the only American goods that are now, or have been for some time past, exposed for sale here as American are kerosene oil, lard, and tobacco.

The former is usually imported direct in sailing vessels, the consumption being about 1,500 cases per month. The laws of this colony prohibit the importation of any products of petroleum for illuminating purposes below 100° test, and each case must be conspicuously marked "Specially dangerous."

LARD.—This article has been imported of late years from the United States in 20-pound tins, and is sold to the Chinese shopkeepers, who, comparatively speaking, do the retailing throughout the island. Lard

of superior quality, and packed in 5-pound tins, would meet with a ready sale direct to consumers. As this article is imported via England, it appears in the government statistical report under the head of imports from the United Kingdom. The consumption is about 600,000 pounds per annum.

TOBACCO.—All the chewing tobacco imported, without doubt, comes originally from America, but is received here from other countries. The description in most universal demand is "black work," in plugs weighing 12 to 14 to the pound. It is probable, however, that a moderate quantity of a better quality might find purchasers. The consumption of manufactured tobacco is about 120,000 pounds per year. There is no demand for American leaf.

Besides the above mentioned articles, it is more than likely that a very large proportion of the hams, bacon, cheese, salt-beef and pork, imported and exposed for sale as English, are of American production, and buyers are generally aware that such is probably the case. These articles, if imported direct and sold as American goods, would, without doubt, meet with as ready sale as they do under another name. As far as my acquaintance with this market goes, I am inclined to think that the name American would not put difficulties in the way of the disposal of any description of goods, and I believe that as good prices could be obtained, if introduced and sold as American, as is now paid for them under the name of English produce.

SEWING MACHINES.—The Singer Company has had an agency established here for the past seven or eight years, and at present an attempt is being made to introduce another first-class American machine, viz, that of the White Sewing Machine Company, of Cleveland, Ohio. The demand is limited.

AMERICAN ORGANS.—A few of these have been sent out here, but this is not an organ-playing community, and I believe the venture has not met with any success.

SCALES.—Those manufactured by Fairbanks & Co. are the only platform scales, to my knowledge, used in the island, except those employed by government, which are of English manufacture. All dealers, with scarcely an exception, use Fairbanks.

So far as I am informed, no effort has been made for some years past to put any other American goods on the market than the few mentioned above. An attempt is, however, now being made by responsible parties to introduce many others that would be likely to dispute the monopoly which has heretofore existed for English and French imports, but in order that such an undertaking should meet with the same success here as in many other countries, more or less encouragement should be given by our home exporters, and as our goods would be of quite an unknown mark here, and in many instances of a different style from what consumers here have been accustomed to, considerable time and perseverance will be required in order to make them known in the market, and I would suggest that such of our exporters as do not feel inclined to test the market by a trial consignment, should at least send samples of such goods as might be suited to the wants of the place, in order that traders may see what they are asked to purchase, and I feel sure that their interests would be safe if placed in the hands of responsible parties interested in the success of the enterprise.

I fully concur in the opinion expressed by some of my colleagues that success in establishing a trade with the United States can only be brought about by Americans having no conflicting interests that might interfere with the attainment of this object. It is not natural to expect

that others will take any special pride in pushing our interests in foreign countries, and as a fact they do not.

The present appears a fitting occasion to thank the proprietors of the Scientific American, American Mail and Export Journal, The Exporter, Oil and Drug News, and American Manufacturer and Iron World, for forwarding to this consulate, monthly, copies of these several publications, which are constantly kept on file here. The valuable information which they contain concerning American articles of export and other subjects of scientific as well as commercial interest, I believe, will do much towards making these far-away places better acquainted with American industries.

The imports into this colony in which America may be able to compete successfully with other countries, are the following:

HARDWARE.—The total imports from all countries amount to the value of about 750,000 rupees.

AGRICULTURAL IMPLEMENTS.—The principal tools used on the estates are; two sizes of heavy cast-steel hoes, one about 7 inches long and 7 wide, the other 10 inches long and 4½ wide, used for making cane-holes, and picks and cane knives. These are in universal demand. Carpenters' tools, household and kitchen ware, builders' hardware, wood screws, cutlery, files, galvanized sheet and corrugated iron, iron bedsteads, and plated ware, are all in demand, but American manufacturers would at first meet with a slow sale. There is every reason to believe, however, that an extended acquaintance with their excellent qualities would do away with this difficulty. Their success would greatly depend on their own merits.

CUT NAILS.—I am not aware that these have ever been tried here. What is called an English nail and French wire nails are those in common use. The yearly consumption of the former is about 315,000 pounds, and of the latter 170,000 pounds. American cut nails would be an experiment, and time would be required to properly introduce them.

GRINDSTONES AND EMERY WHEELS, mounted and ready for use, would probably find purchasers in small lots. Woven wire mattresses are not known here, but I should think they would be well received if properly introduced, as purchasers became acquainted with their advantages.

OIL COOKING-STOVES.—These of English and German make have been offered for sale here, and have met a want which is being felt more and more every day, owing to the growing scarcity of wood for fuel. A really good article, such as I believe is made by our home manufacturers, is needed, and would be in good demand.

WOOD OR COAL COOKING-STOVES are not in great demand, but it is more than likely that the reason for this is, that no article suited to the wants of the people is offered for sale. All stoves sold or exposed for sale are called American, wherever they may have been manufactured. These are, at least in many instances, very poor imitations, and are offered at prices that prevent their coming into more general use. A really good stove, that could be sold at a moderate price, might in time meet with a fair sale.

SALT BEEF.—The yearly consumption is about 400,000 pounds, of which nearly 50,000 pounds come from the United Kingdom, and 300,000 pounds from Australia.

SALT PORK.—The yearly consumption is about 180,000 pounds.

FISH, DRY-SALTED.—The consumption of this article is very large, say about 3,000,000 pounds yearly. Cod would meet with a good sale, particularly during Lent, if prepared and packed so that it arrives here

in good condition. Ling fish, dry-salted, put up whole in 25-pound tins, retails for 20 cents, Mauritius currency (equal to about 16 cents American currency), per pound, and there is no reason why cod prepared in a similar manner should not command good prices.

CHEESE.—The consumption is about 90,000 pounds per year. Of this quantity nearly 70,000 pounds are imported as English manufacture.

BUTTER.—The yearly consumption is upwards of 160,000 pounds. The best received here is Danish, put up in one and two pound tins; and American, of equally good quality in the same sizes of this, would, without doubt, find a ready sale. An inferior quality in, say, 20-pound tins, would also sell well.

BACON AND HAMS.—Of these articles taken together, about 80,000 pounds are consumed annually, by far the greater proportion being of the latter. Of this quantity the imports from England amount to about 70,000 pounds.

FLOUR.—Nearly the whole of our supply comes from Australia in bags, imports from that country amounting to about 10,000,000 pounds yearly. I know of no reason why this article should not be imported from America with profit.

BISCUITS AND CRACKERS, properly packed in tins, would find a good market for a limited quantity. About 30,000 pounds are imported annually from other countries.

DRIED FRUITS, particularly apples, might be introduced with every prospect of eventually meeting with a good demand at remunerative prices, if packed so as to arrive here in good condition. This should be tried on a small scale as an experiment.

TINNED GOODS.—The yearly consumption amounts in value to about 40,000 rupees, and nearly all is imported from the United Kingdom and France and Australia. American tinned fish, such as salmon, dried cod, oysters, clams, and lobsters; vegetables, such as pease and asparagus; and fruits, such as apples, pears, peaches, strawberries, raspberries, &c., would be suited to this market. A remarkable drawback, however, to a direct trade in these goods is that English houses supply the trade, particularly with American salmon and beef, considerably cheaper than American houses do. This state of things does not look as though our exporters were in earnest, and is not encouraging to those interesting themselves in the business at this end.

BRANDY.—The consumption of this, considering the large production of native rum, and the size of the place, is large, say about 33,000 gallons per annum, and is all supposed to be of French manufacture, but the greater part consumed is of poor quality. The importing of this article from America would be like that of a good many others, an experiment, which if tried, should be done with the best quality produced.

WHISKY.—Comparatively very little is drunk, say about 1,300 gallons.

WINES.—Those principally used are claret, sherry, and champagne, the total yearly consumption amounting to about 966,000 gallons, by far the greater proportion being clarets, which are mostly imported in wood. This latter is used daily by the whole well-to-do portion of the population with their meals. It is but natural to suppose that any attempt to introduce American wines here would meet with considerable prejudice at first, at least, but if found to be a good, pure wine, would, I believe, in time be able to compete with those of other countries that are now well known in the market. A good pure table claret and a dry champagne would always be in demand.

CROCKERY WARE.—The value of imports is about 36,000 rupees yearly,

the most of which comes from England and France, but I know of no reason why American manufacturers should not be able to compete with them.

GLASS WARE.—The market has always been supplied from England and France, total imports amounting to the value of about 22,000 rupees yearly, and I cannot see why American goods should not also be imported at a profit.

FURNITURE.—Chairs in shooks, suitable for bed and dining rooms, would be in good demand. These were imported to some extent some years ago and were liked, and are still inquired for by dealers and the public generally. Other articles of furniture might also sell well, such as tables, wardrobes, washstands, bookcases, sideboards, &c. Wooden bedsteads are not used.

LAMPS.—Our supply for many years past has been received from England and France only, and the high prices demanded for these by the importers lead me to believe that Americans could enter the market in competition, at least, so far as prices are concerned, but really good articles only should be sent here.

FILTERS are used by all who can afford to pay the high prices demanded for those imported from England and France, and judging from the complaints of the "press" of the impure water supplied to the city of Port Louis, a good article that can be furnished at a small cost is much required.

PORTABLE HOUSES.—One of these was imported from the United States about twenty years ago, all the wood-work of which had previously been impregnated with some kind of preservative against the attack of white ants, which speedily destroy almost all descriptions of soft wood. During the period when the fever was so prevalent in Port Louis, this, together with many other houses was taken down and removed to a place called Curepipe, situated in the higher part of the island, a village now of about 8,000 inhabitants, and it has been stated by one of the most experienced timber merchants of the place, who himself lived at Curepipe, that it was the only house that he had ever seen arrive there without a sign of the attack of white ants—all the other houses being of teak and hard woods of the country notwithstanding. This American house is still standing at Curepipe, and is, so far as I can learn, in as good a state of preservation as when it first arrived here. I would therefore suggest that dealers at home send to those making a specialty of American imports here, illustrations, plans, and prices of their houses.

LUMBER.—Of late years none has been received from America. Singapore supplies the market with the greater quantity of boards and planks.

By way of England and France we receive Swedish boards and planks, and occasionally from Sweden direct. These are of fir, more like our spruce than pine, and if spruce lumber cut in the same way could be imported from America, it would probably sell equally as well.

The planks above mentioned are about 18 feet long, at least 9 inches wide, and a little more than 3 inches thick. Some of these planks are imported whole, *i. e.*, without having been split up into boards. Others have one cut *nearly* to the end, leaving enough to hold the two inch and one-half planks together, and others having two cuts, making three boards of one inch each; others have three, and others four cuts. If boards and planks could be imported from America cut in a similar manner, they would certainly be more salable than coming loosely and of all lengths as they are usually exported. In this way they would be

handled more carefully, and the ends would be less likely to split, and they would furthermore present a much better appearance. They should be at least 9 inches wide for ordinary purposes, but the lengths are not of so much importance. Planks of 2 and 4 inches are also in demand. Our southern hard pine, for flooring-boards, has never been tried here, but I believe that a good trade could be worked up in them.

MASTS AND SPARS have of late years come from Sweden, but those from America would be equally as saleable. The consumption at this port since the completion of the Suez Canal and the substitution of sailing vessels, to a great extent, by steamers is very small compared to what it formerly was; 500 to 600 sticks yearly of assorted sizes would now more than meet all requirements.

SHINGLES.—American, when formerly imported in ships direct, always sold at good paying prices and would do equally well now. Sawed cedar are preferred. A lot received some time ago from California was much liked. Spruce would probably sell at first, but as all sorts from America go by the name of "American shingles," they might in time hurt the market for those of good quality, as the different kinds of wood are not generally recognized in this market.

LUBRICANTS used for all the heavy machinery of the sugar estates are cocoanut oil, tallow, and castor oil, but it seems as though our manufacturers might supply something cheaper and at the same time very much better, if they would only send samples of their goods for trial.

COTTON GOODS.—There is no doubt but what there would be many difficulties in the way of introducing American cottons here, but perhaps not more than have been experienced in many other countries where they now find a market.

Up to the present moment no efforts have ever been made in this direction, and consumers here know nothing whatever of them. I should be glad to see some of our exporters give these goods a fair trial here. Mauritius merchants are and have been doing a large trade with Madagascar. Formerly it was done, to a great extent, with British cottons, but American cottons having nearly succeeded in driving those of other countries out of that market, the trade with Madagascar is now carried on with Mauritius rum and some descriptions of iron pots. Why should not American cottons, suitable for the Madagascar market, be in good demand by the Madagascar traders located here?

The imports of plain cotton goods in this island amount to nearly 5,000,000 yards yearly, and of printed cottons over 6,000,000 yards.

MISCELLANEOUS ARTICLES.—Other goods which could without doubt be profitably introduced here from the United States are the following, with their present annual imports from other countries: Boots and shoes, about 131,000 pairs; felt hats, over 26,000; candles: composition, about 120,000 pounds; tallow, 6,400 pounds; wax, sperm, about 12,600 pounds; total, say, 139,000 pounds.

About 35,000 rolls of wall paper; other kinds of the value of about 11,000 rupees; toys to the value of 53,000 rupees; also tubs, pails, brooms, harnesses, carriages, leather, fertilizers.

As I have mentioned above, a trade with this island can only be satisfactorily developed with the earnest support of our exporters, and in doing business with first-class houses, such as are in existence here, there can be very little risk if their advice be followed in the selection of goods suited for this market, and I am much encouraged as to the future result of a judicious trial in this direction, and I shall at all times

be ready to respond to any inquiries which may interest our manufacturers or exporters in relation to business with this colony.

THOMAS T. PRENTIS,
Consul.

UNITED STATES CONSULATE,
Port Louis, Mauritius, August 15, 1882.

AMERICAN TRADE WITH MADAGASCAR.

REPORT BY VICE-CONSUL WHITNEY, OF TAMATAVE.

I inclose herewith a tabular statement of the United States trade at this port, and the return of navigation during the fiscal year 1882.

There is still no means of obtaining statistics of the trade of other nationalities here.

Five United States vessels of an aggregate tonnage of 2,779 tons entered this port during the year (three came from the United States direct, one came via Réunion, and one via Aden), and all brought United States goods.

One German vessel from the United States direct, bringing United States goods to the amount of about $37,950, also entered this port.

The amount of the imports from the United States by the five vessels, was $306,738.60. The exports from this port to the United States, as per invoices certified at this consulate, amounted to $310,179.78. Of this amount $163,206.24 was exported by a French firm via Marseilles, and $5,059.11 by a German house via Hamburg, and the produce may have been sold in European market, as the French and Germans have their invoices certified at this consulate, with the idea of sending their exports to the United States only in the event of that market being the better one on the arrival of the produce in Europe.

The imports, as in previous years, consisted largely of domestic sheetings and shirtings, though there was an increase of general merchandise, the value of which was $3,987.61 against $1,542.10 for the year ending June 30, 1881.

Seven United States vessels of an aggregate tonnage of 3,548 tons entered the port of Mojunga during the year, bringing United States goods to the value of $95,044.

The exports from that port to the United States amounted to $242,332.91.

The Andakabé agency only received its outfit in July last, consequently no returns have, as yet, been received from it, and I do not know if any American vessels were at that port during the year.

The total number, of all classes and all nationalities, at this port was 206, and of departures 201, of these 46 were steamers. Aggregate tonnage of arrivals 37,291, of departures 35,091; by nationality: 5 Americans (sail), aggregate tonnage 2,770; British, 15 steamers and 88 sail, making 103, aggregate tonnage 7,684; French, 31 steamers and 48 sail, making 79, aggregate tonnage 20,090; German, 12 sail, aggregate tonnage 3,056; Norwegian, 7 sail; and Hova or Malagasy, 4 sail, tonnage 3,000; 85 of these vessels were small coasters, under British and French flags, of an aggregate tonnage of 1,309, trading between this port and other points on this coast.

It must be borne in mind that this statement is not of the number of different vessels, but that of the number of arrivals and departures;

the coasting vessels having made several trips each; and one steamer in the French mail service, between the islands of Réunion, Nossi-bé, and Mayotté, has called bi-monthly.

Nine men-of-war (2 British and 7 French) have entered the port during the year.

R. M. WHITNEY,
Vice-Consul.

UNITED STATES CONSULATE,
Tamatave, October 9, 1882.

Statement showing the imports and exports between Tamatave, Madagascar, and the United States for the year ending the 30th of June, 1882.

Articles.	Imports.		Exports.	
	Amount.	Value.	Amount.	Value.
American brown cotton (domestics) ..... bales..	3,443	$267,750 99	.....	.....
Remington rifles.....	2,500	35,000 00	.....	.....
Metallic cartridges..... cases..	250,000		.....	.....
Kerosene oil..... barrels..	516	1,071 50	.....	.....
Flour ..... do..	98	980 00	.....	.....
Shooks (empty cases)	750	800 00	.....	.....
General merchandise—clocks, lamps, chairs, watches, &c.....	.....	1,136 11	.....	.....
Dry salted hides.....	.....	.....	70,398	$309,644 78
Indian rubber..... pounds..	.....	.....	253,444	
Vanilla beans ..... do....	.....	.....	107	535 00
		306,738 60	.....	310,179 78

Statement showing the imports and exports between Mojunga and the United States for the year ending the 30th June, 1882.

Articles.	Imports.		Exports.	
	Amount.	Value.	Amount.	Value.
American brown cottons (domestics)..... bales..	1,607	$88,200 00	.....	.....
Kerosene oil ..... cases..	2,580	3,100 00	.....	.....
Soap..... boxes..	3,600	1,810 00	.....	.....
Biscuit ..... barrels..	67	1,075 00	.....	.....
Flour..... do....	64	403 00	.....	.....
Chairs ..... dozens..	50	250 00	.....	.....
Powder..... pounds..	775	116 00	.....	.....
Pilot bread..... half barrels..	40	90 00	.....	.....
Dry salted hides.....	.....	.....	.....	$203,874 69
India rubber.....	.....	.....	.....	38,458 22
	.....	95,044 00	.....	242,332 91

Statement showing the navigation at the port of Tamatave for the year ending the 30th day of June, 1882.

Entered.

Flag.	From—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American	United States			5	2,779	5	2,779
British	Mauritius and Réunion	15	2,220	88	5,464	103	7,684
French	do	28	11,095	48	6,281	76	17,376
	Marseilles	3	2,714			3	2,714
German	Hamburg and London			12	3,056	12	3,056
Hova	Natal and Mauritius			4	3,000	4	3,000
Norwegian	London			1	301	1	301
Total						206	37,291

Cleared.

Flags.	To—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American	United States			5	2,779	5	2,779
British	Mauritius and Réunion	15	2,220	86	5,114	101	7,334
French	do	28	11,095	47	6,074	75	17,169
	Marseilles	2	1,821			2	1,821
German	Hamburg and London			12	3,056	12	3,056
Hova	Natal and Mauritius			3	2,250	3	2,250
Norwegian	London			1	301	1	310
Total						201	35,091

MEN-OF-WAR.

Flag.	From or to—	Entered.		Cleared.	
		Steamers.	Guns.	Steamers.	Guns.
British	Cruising	2	21	2	21
French	do	7	62	6	47
Total		9	83	8	68

AMERICAN MULES FOR THE BRITISH ARMY.

REPORT BY CONSUL SPRAGUE, OF GIBRALTAR.

The novelty of importing mules from the United States to Europe induces me to report to you the arrival at this port yesterday morning of the hired British steamer Castalia, belonging to the Anchor Line Company, bringing for cargo 498 American mules for account of the British Government. These mules were destined for Alexandria, being intended for the British military campaign in Egypt, but not being now required for that purpose, it is reported that the best mules will be selected for immediate conveyance to England, to be kept at Woolwich for the use of the British army transport service, while the remainder will be employed here for government purposes, disposing of such as may be most undesirable.

The steamer Castalia consumed sixteen and a half days on her passage from New York, and I am informed all the mules have been landed in excellent condition, only two having been lost on the voyage, one of them from the effects of a severe kick.

To use the expression of the principal American keeper, who has accompanied these mules, they are "as lively as crickets," and, with very few exceptions, quite ready to be put to any work at once.

These animals seem to compare very favorably with the mules lately purchased by the British Government in Spain; if anything, perhaps, bearing a more compact appearance, though probably not likely to possess the same powers of endurance and rough treatment to which the Spanish mule is so much inured, besides not being acclimatized or accustomed to the provender upon which the latter subsists, which consists chiefly of chopped straw with a small quantity of beans and barley.

I am told several of these American mules have already refused eating beans, and do not seem to take very freely to barley, evidently preferring their accustomed food of hay, oats, and bran, articles which are not to be procured in any quantity in this part of Spain, especially hay and oats.

HORATIO S. SPRAGUE,
Consul.

UNITED STATES CONSULATE,
Gibraltar, September 26, 1882.

PORT CHARGES AT CAIBARIEN.

REPORT BY VICE-COMMERCIAL AGENT FUENTES, OF SAN JUAN DE LOS REMEDIOS.

Caibarien, on the north coast of Cuba, a town of 5,000 inhabitants, is the seaport of Remedios. Through this port all the sugar of this consular district is exported to the United States, say, 55,000 hogsheads of sugar, 5,000 hogsheads of molasses, most of it in American bottoms.

In the harbor there is only 9 feet of water, but at Key Frances,* 16 miles off, there is a safe and deep anchoring place, where all vessels load. No steamers can come here, as all the cargo has to be conveyed by small lighters to Key Frances, and those existing are not enough to load a steamer in a few days.

All trade is therefore made by sailing vessels, and these will find at this port a cheap entry to call seeking orders, and a good chance to try the other ports, this being to windward of them. I hereby call the attention of ship-owners to the charges and regulations of the port, viz:

Custom-house charges in Cuba according to royal decree June 4, 1868.

TONNAGE DUES.

(Registered tonnage.)

1. American vessels arriving and clearing with cargo, per ton	$1 35
2. Arriving with cargo and clearing in ballast	1 30
3. Arriving in ballast and clearing with cargo	1 00

*Immediately following this report will be found a report on Key Frances and San Juan de los Remedios.

4. Arriving with coals equal to or exceeding tonnage, and with general cargo besides.	
Arriving with coals as only cargo, but in less quantity than tonnage, for every ton so occupied.	
For every ton not so occupied	$0 62
Arriving with coals in less quantity, and general cargo besides, for every ton occupied by coals	73
For every other ton	1 35
5. Arriving in ballast and clearing with a complete cargo of molasses	37
6. Arriving in ballast and clearing with island products, for every ton of cargo	1 00
For every ton not occupied	05
7. Arriving in ballast and clearing in ballast	05
8. Arriving in distress, for every ton	05
9. Steamers arriving periodically allowing 6 tons of cargo	
10. For every ton over, with cargo	62½
12. To other steamers the general tariff is applied, but deducting from the total tonnage those tons occupied by engines and coals.	

CHANGING PORTS.

Vessels visiting more than one port, during same trip, will not pay extra tonnage fees.

On leaving the last port all the fees paid will amount to the one marked in the tariff.

MERCHANT CHARGES.

Entering and clearing a vessel at the custom-house, on going to a foreign port (this includes stamped paper and all), $17; if to a port in the island, $8.50; commission on disbursements, 2½ per cent.; commission, interest, insurance, &c., on advances, 5 per cent.; government's interpreter fees, $4.25.

LABORERS.

Estivadors will be had at Key Frances for $3 the day, but agreements may be made with them to stow all the cargo by paying from 20 to 25 cents per hogshead.

BALLAST.

Vessels with ballast suffer a move to the beach to throw it away, under the survey of a ballast-master. The fee for moving is only one-fourth of the pilotage marked in the tariff (rule 4), and that for the ballast-master is 10 cents per ton (rule 8 of harbor regulations); altogether cheaper than in other ports where ballast has to be conveyed ashore through lighters at heavy expenses. It was also obligatory at this port to bring the ballast ashore, but since May 1, 1880, has been disregarded.

COALS.

Vessels with coals are regarded as in ballast and have to go through same proceeding as to moving to the beach and pay the ballast-master, who surveys the operation of putting the coals into the lighters. I find the move unnecessary, but by rule 8 of the harbor regulations, dated March 8, 1872, and the fourth paragraph of the addition, dated May 1, 1880, the captain of the port understands that these vessels must pay same fees as in ballast.

REGULATIONS TO BE OBSERVED BY THE HARBOR INSPECTORS AND BALLAST-MASTERS OF THIS PORT AND ANCHORING PLACE AT KEY FRANCES.

In order to avoid the injury that this port and anchoring place, at Key Frances, suffer owing to its slight depth of water, the want of a proper person to look after the ballasting and unballasting of vessels, I have found good to establish the following regulations expressing in them the duties of the harbor inspectors and captains of vessels of all nations:

1st. Appoint a ballast-master for this port besides the one existing at Key Frances.

2d. The duties of them will be, visit the harbor frequently and inquire, the moment the vessel drops anchor, whether she brings ballast, its quantity and nature for which purpose the harbor-masters must keep a boat capable to do the work. The captain of this port will mark out the limits that each one have to watch over.

3d. Prohibit any boat from coming alongside of a vessel until the visit of the board of health has been effected.

4th. Overlook the distribution of the hands that are appointed for ballasting and stowing, and inform the captain of the port of any infraction he will note.

5th. No person can ballast without a written order from the captain of the port, who will design the place where they are to be deposited. He who disobeys this order will pay three dollars for every twenty quintals, and in case of doing this operation at the wharf, in the channel, or in any other places, $6; for less quantity than twenty quintals they will pay $2.

6th. He who, from carelessness in taking ballast, allows any part of it to fall in the water, will pay $12 fine for the first time and double in case of infraction. The same fines will be imposed to all captains and patroons of lighters who will infringe these regulations in any anchoring place along the coast even though no naval authority reside there.

7th. These regulations will be published in Spanish and English languages, and a copy of them will be delivered to captains of vessels anchoring at this port or at Key Frances, being obliged to return it the day of clearance.

8th. In remuneration of these services the harbor inspector will charge as follows:

For every 10 tons of ballast given or taken away, $1. All other loose article or liable to sink when in water, not mentioned herein, will pay in proportion to same tariff.

Caibarien, the 8th day of March, 1872.

The captain of the port.

JUAN B. SOLLOSSO.

ADDITION.

In regard to the claims made through their consuls by masters of British and American vessels arriving at this port of Key Frances with ballast, as to the prejudices occasioned by having to discharge and the conveyance of said ballast to the interior of this port, as also the great cost, offering themselves to see that the captains comply with the rules marked, in order to avoid complaints of throwing ballast overboard injuring the port, and in order to conciliate their interests with the accomplishment of the port regulations,

I hereby, in addition to the rules in force in this port in respect to discharging ballast, ordain the following rules to be observed:

Masters of vessels arriving at Key Frances wishing to discharge their ballast, by asking permission personally, may discharge said ballast, at the place appointed at Key Frances, by moving their vessels under the direction of the pilot and inspection of the harbor-master, paying the fees of the port appointed and approved by the superior dated April 6, 1872.

They may also have their ballast discharged in lighters to be conveyed to the terrepleins in this port if so requested, with the consent of the owners, having likewise to move their vessels to the place appointed, only paying the harbor-master one-half of the former fees.

They may likewise, if so convenient to them, apply for permission to transfer their ballast to another vessel under the same rules and conditions.

It is strictly forbidden to put sand or dust ballast on deck on no account, subjecting themselves to the fine of $25 gold.

Captains wishing to ship stone ballast for trimming their vessels may apply for it, asking of this authority to move at the place appointed, and take it under the survey of harbor-master.

It is not allowed to perform any ballast operation, except to be done on the ballast ground.

Caibarien, May 1, 1880.

The captain of the port.

JUAN B. SOLLOSSO.

PILOTAGE.

Vessels have to pay same pilotage for remaining at Key Frances as if proceeding to Caibarien, and this makes the tariff a little higher for those at Key Frances, but this circumstance is of no account compared with other benefits.

Captains of vessels remaining at Key Frances have to come in their own boats to make entry at Caibarien, proceeding at once to the captain of the port's office; but by paying $3 in and $3 out, they can have a man and a boat at their disposal.

It will be found strange that vessels should be compelled to pay pilotage to Caibarien when remaining at Key Frances, and not bring the captain ashore at the expense of the port.

I have applied to the captain of the port, but he would not oblige the pilot to bring the captains in a covered boat. Nevertheless captains will be fined if by coming by themselves they do not arrive at the captaincy of the port before coming ashore.

This small inconvenience is favorable to captains, as they can leave the vessel when best suited to them.

JOSE G. FUENTES,
Vice-Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Caibarien, November 14, 1882.

PORTS OF SAN JUAN DE LOS REMEDIOS AND KEY FRANCES.

REPORT BY VICE-COMMERCIAL AGENT FUENTES.

1. PORT OF SAN JUAN DE LOS REMEDIOS.

Tariff of pilotage, free outside the banks and obligatory among them, for foreign vessels not assimilated, approved by His Majesty the King, in the royal decree of March 24, 1881.

Inwards or outwards:

Under 80 tons	$9 20
From 81 to 120 tons	11 50
From 121 to 150 tons	14 60
From 151 to 175 tons	16 50
From 176 to 200 tons	19 00
From 201 to 300 tons	23 50
From 301 to 500 tons	28 50
From 501 to 1,000 tons	32 25
Over 1,000 tons	38 50

Tariff of pilotage, free outside the banks and obligatory among them, for Spanish and foreign vessels assimilated.

Under 80 tons	$7 00
From 81 to 120 tons	9 00
From 121 to 150 tons	11 00
From 151 to 175 tons	13 00
From 176 to 200 tons	15 00
From 201 to 300 tons	19 00
From 301 to 500 tons	23 00
From 501 to 1,000 tons	26 00
Over 1,000 tons	31 00

NOTICES.

1st. According to the orders in force the vessels not obliged to take pilot are those registering less than 80 tons and those employed exclu-

sively in coasting trade, whatever be their tonnage, as well as those foreign vessels which by international treaty are assimilated in this case to the Spanish ones.

2d. The steamships that come in or go out the port, employing their engines, excepting those employed in foreign trade, of more than 500 horse-power, will pay for pilotage, when they use it, one-third less than is established in the respective tariff, according to their tonnage and flag; it is understood that said deduction is to be made from the net amount remaining after discounting the amount for the pilot's boat.

3d. The sum established in the tariff is for pilotage inwards or outwards.

4th. Vessels that change place at the wharves for loading or unloading, or those that remove from one place to another between Key Frances and Caibarien, will pay the fourth of the pilotage marked out in the tariff for coming in, according to tonnage and flag.

5th. Vessels for moving to any other anchoring place on the coast inside Key Frances will pay two-thirds of the correspondent pilotage, according to their tonnage and flag.

6th. The pilotage fixed for coming in or going out is the same whether the vessel remains in Key Frances or proceeds to Caibarien.

7th. Pilotage will be calculated upon the total tonnage of the vessel.

8th. Vessels coming in or going out during the night. will pay one-third more than is fixed in the tariff.

9th. If a vessel takes on board a pilot during the night and does not employ him until day, she will pay for his sojourn on board $4.

KEY FRANCES AS A PORT OF CALL.

Key Frances, being situated on the channel to windward of Sagua, Cardenas, Matanzas, and Havana, is the best port on the north side of the island for vessels to call seeking orders.

Due to the influence of the writer, the local authorities of the island have granted an additional rule to this tariff, by which all vessels taking the port of Key Frances, and leaving without operating, will only pay one-third of the fee marked for pilotage, and which will go into effect as soon as it has been approved by His Majesty the King.

By the time this notice comes to the knowledge of shipowners no doubt this rule will be in force, as it will be forwarded favorably informed by his excellency the commandant-general of marine of the Havana station. I hereby encourage shipowners to send their vessels to Key Frances for orders.

CUSTOM-HOUSE.

There is a customs officer at Key Frances, and he will provide captains with a dispatch for the collector when the vessel is loaded. The official hours for this officer are from sunrise to sunset, and he will deliver the papers to the captains free from gratuity if applied for during said time.

The custom-house hours are from 10 a. m. to 3 p. m.

One day is allowed to merchants for entering the vessel and one day for clearing.

Captains by arriving at 2 o'clock p. m. may be entered or cleared the same day.

I would here call the attention of shipmasters to the following regulations now in force in this island:

General orders to be observed by captains of vessels trading between foreign ports and the Island of Cuba on and after the 1st May, 1881.

ARTICLE 26.—Captains of all vessels or steamers, whether in ballast or with cargo, coming from a foreign port, be the cargo in transit, to be entered in bond, for transshipment, or for immediate consumption, are obliged on arrival at any of the ports of the island to present a manifest declaratory of all the cargo, including parcels and small wares, signed by said captains with visé of the Spanish consul at the port of departure, or should there be no Spanish consul, by the local authorities of the place. (See article 27.)

Vessels from Spanish ports shall produce the manifest and sealed sea letter from the customs authorities of the place of departure.

The manifest will be considered as the basis or premises for all future consultations or operations, and must necessarily express:

1st. The rig and name of the vessel, her tonnage, flag, where owned, number of crew, name of captain and consignee of vessel, and the port or ports whence she comes.

2d. Port or ports for which the cargo is destined.

3d. The quantity, class or kind, marks and numbers, and the gross weight of all packages on board, inclusive of the small wares or parcels belonging to the crew, class and kind of the merchandise, name of shipper and consignee, or if to order, each separately, and their port of destination. The numbers and weights to be expressed in figures and in writing. The terms merchandise, provisions, groceries, goods, articles, or any other equally vague description will not be tolerated.

4th. Cargoes in bulk must be declared on manifest either by number, weight, or measure, as they may be classed according to tariff of the island, and it will not be necessary to state the weight unless the article pays duty by weight.

5th. Cargoes of lumber in bulk are to be declared by the number of boards or pieces which constitute the same.

6th. Packages containing dry goods or opium shall be declared separately, without including them with other goods, though all should be shipped or destined for the same person. If a package contains beside other merchandise either of those mentioned in the previous paragraph, the kind, quantity, and weight of such must then be stated.

7th. The manifest of a foreign vessel may be expressed in the language of the nation to which she belongs.

8th. When the ship calls at several foreign ports the captain is at liberty to draw up and have his manifest visé'd of all the cargo at the last port of call whence she sails to the island, or he can bring as many manifests as ports of call in which the ship has taken in cargo. In the latter case the consul shall put a note on the manifest embracing the others in order to secure the presenting of all the manifests.

9th. The consuls will be responsible, when certifying to manifest, that all these particulars be expressed, and will put a note, duly sealed, at foot, calling attention to any alterations, corrections, or scratchings out that there may be on the manifest, drawing lines through any blank leaves there may be attached to same. It is their duty on same day to inform the director of finance, by writing, of their having so done.

10th. Any addition, alteration, or writing between the lines is of no account unless authorized by consul.

11th. Should the owners, shippers, or consignees become aware of any discrepancy or error on the manifest certified to by the consul, and of which the captain is the bearer, it is their duty to inform the collector of the customs of the port to which the vessel is bound of the fact, and his duty to report the matter to the director-general, accompanied by the document in question.

12th. The director-general is at liberty to admit or not the rectification asked for, provided the vessel has not touched at any port in the island prior to receipt of the correction by the collector of customs to whom it be made.

13th. If a vessel puts into a port of the island in distress she will not be required to present a certified manifest, but will be obliged to make and deliver a manifest within a time prescribed by the collector.

14th. Only gold or silver in bars or coined will be allowed to be added by note to manifests, and then it must be done within four hours after the arrival of the vessel.

ART. 27. The privilege of having the manifest certified to by the local authorities of the port of departure spoken of in article 26, will only be allowed in cases where the residence of the nearest consul be at a greater distance than 30 kilometers; when the distance be less, the captain will be forced to resort to the nearest consul or vice-consul for the visé.

ART. 28. If a vessel in distress, bound for a foreign port, puts into a port of the

island, a reasonable time will be allowed the captain to present a manifest in accordance with the stipulations contained in article 26, with the exception of the visé of consul. Should she be bound for a port in the island other than that into which she has put in, the manifest will be returned to the captain viséd by the custom-house authorities, a copy being kept at that place, signed by the captain or his consignee, and another sent the director-general.

ART. 29. If a man-of-war be the carrier of goods liable to duty, the paymaster will be forced to present a manifest of same, approved by the captain.

ART. 30. Immediately on arrival and on delivering his manifest, the captain must also give a note specifying:

1st. The pigs of iron he may have on board for ballast.

2d. The provisions and stores on board, say, oil, fish, rum, spare anchors and chains, rice, sugar, candles, coffee, hemp, mineral and vegetable coal, fresh and salted meats, beer, cordage, chocolate, hard bread, grains, meats, eggs, dry vegetables, preserved food in tins, firewood, dressed timber for masts and spars, lard, butter, bread, potatoes, paste for soup, salted fish, salt, tallow, cider, tobacco, tea, canvass, vinegar, wine, and the arms and ammunitions for the vessel. Likewise, a list of passengers and their trunks and effects, and the place to which they are bound.

ART. 31. Captains must mention at time of the customs visit if they have lost any part of their cargo on account of bad weather.

ART. 35. Twenty-four hours after arrival, whether a working day or holiday, the captain must deliver to the custom-house two copies of his manifest written in the Spanish language. Should the vessel carry cargo for other ports of the island, a partial manifest of cargo for port entered must be presented separately. One of the copies of the general manifest, stating thereon that the original is duly viséd or not, will be returned to captain, and must be presented by him at each of the ports of call on the island to serve as reference for comparison with partial copies. The same will have to be certified to at each of the custom-houses at ports of call and be archived at the last port of destination in the island. Having presented at first port the general manifest, three copies of partial one must be delivered at each port of call.

ART. 37. The collector of customs is at liberty to board a vessel at any time he may see fit, and seal the hatches and other departments of the vessel until she be allowed to discharge. The collector is also at liberty to delegate this power to a subordinate. When such a case arises with a foreign vessel, it is the duty of the collector to notify the consul or vice-consul of the nation to which she belongs, fixing an hour for the intended visit, and should the consul then not appear, shall proceed on board after attaching a note to that effect to manifest.

ART. 60. Passengers' baggage can be discharged as soon as the officer who visits the vessel signs the detailed list presented to him of the same by the captain. A custom-house officer will accompany said baggage to shore.

FINES.

ARTICLE 121. Masters of vessels will be subjected to the following fines:

1st. For not having the manifest viséd by Spanish consul, $500, besides being liable for those stipulated hereafter.

2d. For every omission or deviation from article 26, from $10 to $100.

3d. For non-delivery within twenty-four hours after arrival of the two copies in Spanish, or in case they do not agree with the original, $50, besides having to make them out or remake them, as the case may be.

4th. For non-delivery of the copy of the general manifest at ports of call, $100.

5th. If there be a difference in the gross weight as declared on the manifest and the actual weights of goods of over 10 per cent., he will be liable to a fine of from $10 to $400, if it can be proved that the weight declared on manifest be different from that stated on bill of lading.

6th. If packages containing opium or dry goods be declared by some other name and properly described on bill of lading, then the master will be liable to be fined from $100 to $600 per 100 kilograms net weight.

7th. For moving from one anchorage to another without permit from custom-house, $50 fine.

8th. For not delivering list of passengers' effects, on being visited by custom-boat, $20 fine, and be responsible to passengers for detention arising therefrom to their baggage.

10th. For not declaring the pig iron he may carry as ballast, or stating correct weight and quality of same, twice to ten times the amount of duties on difference, be it more or less than that actually on board.

11th. For any stores or provisions on board not specified on list delivered (article 60), twice to ten times the duties on same.

12th. For every package of goods found on board and not declared on manifest, twice to ten times the duty on same, according to tariff.

13th. For every package declared on manifest and not delivered, $200.
14th. For breaking the seals on hatches, placed there by the customs, $500 fine.
15th. For breaking the seals on packages on board placed there by customs, $200.
16th. For discharging goods on manifest prior to receipt of permit, double the ordinary duty on same, and if such goods be not included on manifest, three to ten times the duty, besides being liable in the latter case to criminal prosecution.
17th. For landing persons or goods from vessel destined to quarantine in places other than designated by the authorities, from $50 to $500.
18th. For declaring the precious metals (in bar or coined) in manifest or additional note, one per cent. of the value thereof.

TO SHIPMASTERS.

Shipmasters by being acquainted with the foregoing report and regulations of this port will find no trouble on arriving here, and find that it has improved in facilities.

As a port of call they will find less expenses than before, as I hope within two months the amendment of the tariff of pilotage will be in force, and with twenty or twenty-five dollars of expenses they can try it, and be in the windward for the other ports of the island.

JOSÉ GZ. FUENTES,
Vice-Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Caibarien, November 14, 1882.

AMERICAN SILK CULTURE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

FRENCH CONSULAR VIEWS ON AMERICAN SERICULTURE.

The acting consul of France at New York, Mr. Truy, has made a report to his government on the subject of the efforts at present being made to organize and establish sericulture in the United States.

Though there is but little in this report which is not already pretty well known by those interested in the subject, still, as a considerable number of our people are giving the matter serious attention, it may prove of interest to give the views of a representative of one of the oldest and richest silk-producing countries of the globe, and to briefly comment on his observations:

Before the war of independence [says Mr. Truy] the raising of silk-worms occupied very little the attention of the Union. Later on, breeding was commenced. In 1843 mulberry trees were planted with a sort of frenzy. Sericulture was proposed on a vast scale; the infatuation took the form of speculation; then came disease to the trees, financial crisis, and heavy losses, the souvenirs of which remain, even after forty years. * * * Though the raising of silk-worms has not yet come back to the point of 1843, still the proof then afforded has since been fully established of the suitableness of the climate to such production, and there is every reason to believe in its assuming its former importance.

The Silkville colony, founded in 1870, supplies to-day about 10,000 pounds of cocoons per annum. In Texas and California mulberry trees have been planted on the new lands. The yield in Kansas increases yearly, and in 1880 the value of cocoons harvest represented the sum of $75,000. * * * The quality of the cocoons—are they equal to similar produced in foreign countries? This is a disputed question. A journal of Paterson, the great center of silk manufactures, asserts that American-raised silk is generally inferior and inadequate for the production of silks of the first quality.

At the Franklin Institute (Philadelphia), at a recent meeting, Mr. Blodget gave the

results of a comprehensive study made between American raw silk and raw silk imported from foreign countries.

Mr. Blodget was of the opinion that the fiber of the American-raised cocoons was stronger than that of foreign silk.

But this question of the manufacturing value of American-raised silk, however important, must yield to another, viz, the cost of production, upon which must always depend the employment, whether of the native-grown or foreign-imported article.

Now, in consequence of the high price of manual labor in the preliminary operations, such as the reeling of silk from the cocoon, American silk costs much more than that which is imported from abroad.

This fact would seem first and last beyond all to render the wide use of native-grown silk impossible.

Americans, it is true, reply to this all but insurmountable objection, by one of their most reliable journals, that "the astonishing progress made by our silk manufacturers has been principally owing to the discovery and use of improved machinery, far superior to any yet known or employed in Europe. Similar inventions in machinery for reeling silk from the cocoon would give the same remarkable development toward the raising of silk-worms."

Mr. Consul Truy thinks this argument is more theoretical than practical, and he goes on to say that no mechanical invention, however ingenious, can replace the human hand in the reeling of cocoons, the essential point being (which he asserts no mechanism can attain) not to break the filament.

From my previous dispatches to the government, the Department will have learned that an American engineer, Mr. Edward W. Serrell, jr., had attempted this pronounced insurmountable obstacle, and had succeeded by his invention of automatic machinery in thoroughly and completely accomplishing this object.

I have great pleasure in reporting to-day that 50 of the Serrell automatic reeling machines are about being placed in a filature in the celebrated silk-growing department of the Drome, within 50 miles of Lyons.

Mr. Truy proceeds to give an account of the attempt and *failure* of the Women's Silk Culture Association of Philadelphia to reel silk by a new invention, and concludes his report to the French Government as follows:

The problem remains unsolved. As long as the United States cannot find the means either by the reduction in the cost of manual labor or the invention of reeling machinery, it will be impossible to make sericulture a thriving American industry or one that Europe may fear as a competitor.

Growers having no home market for their cocoons are with difficulty persuaded to raise what they cannot sell. But even should the efforts of the Women's Silk Culture Association succeed, they would not be able to produce more than the supply of raw silk required alone by the silk manufacturers of Paterson.

On the eve of the application of an American invention for the reeling of silk by automatic machinery, which is destined, I believe, to have as important results for the people of the United States as the great inventions of Hargraves, Arkwright, Compton and Cartwright have had for cotton in England, I may be permitted to take issue with Mr. Truy, and in an early dispatch descriptive of this new mechanical process demonstrate the perfect feasibility and practical value of this discovery.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE.
Lyons, September 28, 1882.

PROHIBITION OF AMERICAN PORK IN GERMANY.

REPORT OF A. A. SARGENT.

I have the honor to state, referring to my dispatches recently sent stating the agitations for and against the prohibition of the importation of American swine products into Germany, that strong protests similar to that of the Hamburg merchants have been sent from Bremen and several other cities interested in the commercial aspects of the matter.

During the past week Herr Richter, the distinguished leader of the Progressist party in the Reichstag, made a powerful speech in opposition to the proposed exclusion, denying the soundness of the reasons advanced for such action, and also the power of the federal council to make the prohibition without the sanction of the Reichstag.

I presume you are aware that the proposition is pending in the Bundesrath, and is to be effected by a simple order or decree of that body, and is not to be adopted in the form of a law. In fact it could not gain sanction as a law. In a more popular body, like the Reichstag, it would surely be defeated.

The Bundesrath is peculiarly under executive influence, and may be persuaded to issue the decree, no matter what the opinion of the Reichstag or of the public.

The power claimed for the Bundesrath is under an article in the tariff laws of July 1, 1869, which reads as follows:

ARTICLE 1. All productions of the nature of art or industrial productions may be imported into, exported from, or transported through the entire district of the Customs Union.

ART. 2. Exceptional measures may be temporarily adopted under extraordinary circumstances for the prevention of dangerous contagious diseases, or for other sanitary or precautionary reasons, for a part or the whole district.

The power herein granted is obviously for temporary purposes and for emergencies. Some great and unusual calamity impending must have been in the minds of the legislators. It is ridiculous to say that any emergency now exists or disaster impends, from the importation of American pigs or pork; certainly not one so threatening that there is not ample time for ordinary legislative processes.

In view of these obvious considerations, it is alleged that the Progressists party intends making an interpellation in the Reichstag regarding the threatened prohibition of the importation of American pork products. This interpellation I find reported in one of the local papers as follows:

In reference to the project now pending before the Bundesrath to prohibit the future introduction of American pork products, the undersigned would address the following inquiries to the Imperial Chancellor:

1. Has the Bundesrath caused any statistics to be collected showing to what extent American meat products, especially bacon, are necessary articles of food to a large class of the poorer people in different parts of the country?

2. Does the Bundesrath propose to cause special statistics to be collected relating to the alleged unwholesome character of the American meat products at the port of entry and at the place of origin of the articles?

3. Does the Bundesrath, apart from the question of a continual sanitary consideration in the premises, hold itself authorized to adopt measures restricting importations without the concurrence of the Imperial Parliament, by virtue of the right vested for temporary circumstances only in the Bundesrath by article 2 of the tariff laws of July 1, 1869?

These questions go to the root of the matter. The considerations which they raise can hardly be ignored in the Bundesrath, though they may not prevail to prevent the foreshadowed action.

A. A. SARGENT,
Minister.

UNITED STATES LEGATION,
Berlin, December 8, 1882.

AMSTERDAM INTERNATIONAL EXPOSITION.

REPORT BY CONSUL ECKSTEIN.

I have the honor to report that up to the present there has not been received at the consulate even the first communication from any person in the United States asking any information whatsoever or otherwise concerning the approaching International Exposition at Amsterdam.

Thinking this, to say the least, rather strange, I mentioned the matter to a friend of mine and a member of the "executive committee" in an unofficial way, and requested him to furnish me some information as to whether any applications at all have been received for space in the Exhibition building from Americans intending to exhibit here, and as to certain other matters relating to the progress and prospects of the "Exposition."

He has been kind enough to hand to me, a few days ago, a short memorandum, from which I glean information as follows, viz:

Up to the present, space to the extent of only about 440 square feet has been actually secured by six persons or firms in the United States, or by their agents here for them.

A considerable number of Americans, directly or through their agents here, have made inquiries at the office of the commissioner-general of the Exhibition for all sorts of information, but so far no space in the Exhibition buildings has been bespoken beyond the amount above stated.

The following-named countries are known to participate in the Exhibition: England, France, Germany, Belgium, Switzerland, Austria, Russia, Spain, Italy, China, and Japan, &c., but to what exact extent these different countries or the intending exhibitors of same have already engaged space in the Exhibition buildings I am not informed.

It appears from the memorandum that the following mentioned governments have appointed commissioners, namely: England, France, Belgium, Spain, China, and Japan, and British and French colonies.

There seems to be no certain time fixed up to which space may be applied for and secured, excepting that applications for entire sections must be made before the 1st of December next.

It was originally anticipated here that manufacturers, inventors, and others from no other country would avail themselves with greater alacrity of the existing opportunity than those of the United States, and that they would certainly make an extensive display here, but as it is now observed that the enterprise is viewed with comparative unconcern and indifference in the United States, it causes surprise and disappointment here.

If this exhibition is to come and pass without a considerable participation therein by exhibitors from our country, as present appearances indicate, it cannot be from want of timely and sufficient knowledge in possession of our people respecting it.

So far as I am concerned, I can say that when the subject of holding an exhibition here was first mooted it received my fullest attention, and

was closely followed up for many months until the negotiations were completed and the matter settled.

I then immediately reported it to the Department in my dispatch No. 166, of September 21, 1881,* and since then I have informed the Department of everything concerning it which seemed to me as likely to be interesting and valuable, or necessary to be known to possibly intending exhibitors or the general public.

In addressing the Department now on this subject it is by no means for the purpose of stimulating our people to action, or urging them to evince a livelier interest in the matter than they seem to have done hitherto.

Participation in the forthcoming Exhibition will prove a rather expensive affair to American exhibitors, I expect; and as I cannot be positive, or say with certainty to what extent, if to any, they will be compensated for their trouble and outlays by immediate or future benefits as the result of such participation, I consider it would be imprudent on my part to attempt the exertion of any influence.

As to whether the Exhibition in its entirety will turn out a success or a failure, I am as yet utterly incompetent to judge. I can say, however, that the opinions on this important point, freely expressed here by parties best qualified to form an intelligent opinion on the subject, are far from being unanimous, but, on the contrary, quite conflicting.

Nevertheless, I would venture to state, it occurs to me that, whether the Exhibition, as a whole, proves successful or not, it would be likely to result advantageously to American manufacturers, producers, and exporters if a full and well selected display of all sorts of articles known to be suitable and desirable for the markets of this country and its "colonies" should be made.

It may be confidently expected that during the term of the Exhibition, from May to October, 1883, the same will be visited by nearly every one in any way interested in the commerce and trade of this country and its "colonies," as well as by many thousands of consumers from all parts of the land.

The effect of this might be that very many articles, the product and manufacture of our country, being so long and so prominently brought to the notice of the general public, and especially such articles as are already in the trade here, would in future find a much larger market, whereas many others, never before imported into Holland, might, as a consequence, be introduced, a demand for them created, and a trade therein established.

The Hollanders can hardly believe that the people of the United States can or will prove apathetic to the undertaking in question, considering that the Dutch public has, for so many years, shown such great confidence in all sorts of American enterprises, and invested and speculated, and still does, in its securities of every description, to an almost unlimited extent.

Whether this constitutes a good and sufficient reason why our people should now bestir themselves in this matter, I think it best to leave to their own judgment.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, October 23, 1882.

*Published in "Consular Reports" for November, 1881, No. 13. Another report thereon was published in "Consular Reports" for May, 1882, No. 19.

INCOMBUSTIBLE WOOD.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA, ON PROFFESSOR HOFF'S INVENTION FOR RENDERING WOOD INCOMBUSTIBLE.

For the information of American manufacturers and industrialists, I beg to inclose herewith translations of a communication and its inclosures, received from Prof. Bogden Hoff, professor of chemistry at the Oberrealschule, in Jaroslaw, Galicia, relative to his invention for the purpose of rendering wood incombustible.

If the advantages claimed by the inventor, and apparently supported by experiments of experts, can be realized, great practical advantage, it would seem, should be derived from this process, and humanity benefited by the employment of incombustible wood.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, December 2, 1882.

Professor Hoff to Consul-General Weaver.

JAROSLAW, GALICIA,
November 23, 1882.

SIR: In tendering my sincere thanks to the consul-general for his kind intercession in behalf of the practical application of my invention—to render wood incombustible—I have the honor at the same time to reply to the questions addressed to me in No. 3543 of November 21, 1882, as follows:

My invention for rendering wood incombustible (not meaning simply "difficult to ignite") I demonstrated in July of this year before several experts in Vienna; for instance, before the marine section of the ministry of war, before staff of the military engineer corps, twice in the office of the imperial architect, before the inspector of state railways, Mr. Loth, and before the editor of the Wiener Gewerbe-Zeitung, Mr. Ackermann, and always with the greatest recognition of properties, almost incredible, to render wood really incombustible and non-inflammable.

In consequence of these experiments Mr. Ackermann has described these qualities more minutely in No. 14 of his paper, and has caused an examination of the wood to be made without my knowledge, regarding which an opinion is inclosed in No. 15, under C. B. In England, also, my wood was examined, that is to say, in the office of the Iron newspaper, results of which were published in No. 498, under date of July 28, 1882. Furthermore in Bavaria, and finally in Warsaw, where a very commendatory article appeared in No. 17, 1882, of the Polish newspaper Inrynierjai Budowikso.

My invention would, despite these admissions, have but a theoretical value, if the possibility of producing wood by manufacture, and at the cheapest prices, were not an integral part of it, cheap in regard to the amount of capital needed for establishing a manufactory (16,000 florins), as well as in regard to the manufacture of the wood itself. That I have obtained favorable results in this is proven by the fact that one of the first industrial establishments for impregnating wood in Vienna, which has seven branch houses in Austria and twenty-three in Germany, has acquired my invention for these two countries, which may serve as the best proof of the excellency of my invention.

These establishments produce impregnated railway tiers, and the same apparatus furnish also incombustible woods.

It not only applies to the manufacture of incombustible wood, but also to the manufacture of incombustible textiles, a new felt for roofs (without tar); furthermore, to the dying of wood through its entire mass, in any desirable color, and the manufacture of a very cheap waterproof varnish from petroleum refuse; to this must be added, that for the manufacture of wood the refuse of industrial establishments is employed, which is of no other value, since it cannot be put to any other use.

For Austria-Hungary I have a patent for five years, and for other countries I have applied for patents.

The purchase of my patent for America may be made in two ways:

First. The purchaser can either pay me for my invention the round sum of 100,000 florins or $40,000.

Second. He must guarantee me for fifteen years an annual rate of 50 kreuzers (20 cents) per cubic meter incombustible wood at a warranted minimum production of 15,000 cubic meters; 2 florins (80 cents) per hundred kilograms varnish; the other products according to special agreement; aside from this the purchaser must pay me 10,000 florins ($4,000) cash on signing of the agreement.

Being unacquainted with methods and persons in America, conditions as mentioned in No. 2 would be subject to furnishing satisfactory security. If I am allowed to draw a parallel between prices of chemicals in America and Austria, the entire cost of preparing a cubic meter of incombustible wood in America would be, at the highest, $1.50.

I should be glad to add a few samples of my wood to this letter, but as I have not acquired yet a patent for America, and chemical analysis might discover the substances employed, caution compels me to desist, but I am quite ready to demonstrate the properties of my wood to the United States consul-general on my coming to Vienna.

Those specially interested may in the mean time inform themselves by reading the accompanying newspaper articles.

The color of the wood suffers no change, nor are its durability, firmness, and tenacity impaired. It cannot, in this respect, be distinguished from ordinary wood, since harmless and indifferent ingredients are employed in its preparation.

I shall be thankful to the consul-general if through his instrumentality my invention could be made to fulfill its humane and industrial mission in America, as it does in the Old World, and I beg to add the request that you would promote my interest in America to the utmost extent.

I am, sir, very respectfully, yours,

BOGDEN HOFF.

The UNITED STATES CONSUL-GENERAL,
Vienna, Austria.

INCOMBUSTIBLE WOOD.

[Translation of an article appearing in the Gewerbe Zeitung of Vienna, dated July 16, 1882.]

Many attempts have recently been made to deprive wood of one of its most dangerous properties, its too great liability to complete destruction by fire. To this end fireproof paints, artificial petrifaction, and filling of the pores of the wood with incombustible substances have been employed; none of these attempts have so far, however, had a satisfactory result, and all hopes had nearly been given up of ever producing incombustible wood. The high price of the material employed was likewise a reason for desisting from further attempts. (See Bolley's Technology of Wood, and Gollgetrew's Building Materials.)

Mr. B. Hoff, professor of chemistry at the state college in Jaroslaw in Galicia, has occupied himself since 1878 with the production of incombustible wood, and his unceasing trials have resulted in enabling him to produce in a cheap and easy manner a wood not only uninflammable but even incombustible.

We enumerate in the following the excellent qualities of this wood: Incombustibility at high degrees of heat (temperature when glass melts), whereby it neither burns with a flame nor brightly glows, generates no suffocating gases or smoke, and gives out but little heat; a glow on the surface in the open air, as well as in a strong current, without burning or igniting thereby, but extinguishing momentarily. When exposed to great heat for a length of time there remain no ashes, but a compact coal which does not burn. At the same degree of heat wherein the incombustible wood shows the above-mentioned properties zinc sheets melt in seven seconds; slate breaks into pieces, tiles become glazed, and felt for roofs burns with a bright flame. Besides this the last-mentioned roofing materials offer no protection whatever in case of fire breaking out from the inside, because they are fastened upon boards.

The chemicals necessary for the production of the incombustible wood consists of the cheapest refuse of industrial establishments, which the present industry absorbs. The process of manufacturing is simple and cheap, whereby the price of a cubic meter of incombustible wood will be raised only a small part of a fraction, and may be produced in all dimensions. This makes it accessible to all classes of the population.

The shingles made from this incombustible wood have a pleasing appearance, resemble tiles, are cheaper and safer against fire than felt, zinc sheets, &c., and, since the process preserves the wood, last from twenty-five to thirty years.

On considering the qualities of Hoff's incombustible wood and its beneficial results for the safety of life, property, buildings, manufactories, ships, furniture, and instruments, the invention may justly be regarded as one of the most useful of our century, and we can only hope that incombustible wood will soon be rendered accessible to us in any desired quantity.

INCOMBUSTIBLE WOOD.

[Translation of an article appearing in the supplement of the Gewerbe Zeitung, of Vienna, No. 15.]

The article which appeared in No. 14 of our paper, headed "Incombustible wood," gave us occasion to have a specimen of this wood, which was sent us, examined by an authority, and the following was the opinion which we received:

"I have made trials to-day with the 'incombustible wood,' and must confess that it answers the purpose in every respect. When exposed to the flame of a blowpipe it proved to be completely uninflammable, and it was only with difficulty that the edges could for a time be brought to a glow. The production of smoke is exceedingly small, and the turning to coal takes place very slowly. It is greatly to be desired that this excellent invention, in the interest of life and property, should find its way into the widest circles.—C. B."

We were also present at an examination of Hoff's wood made by an expert of European fame in the presence of leading engineers, and must own that the results obtained regarding incombustibility and power of resisting heat surpassed our expectations, especially when we saw that this wood, when exposed to a heat wherein glass melts, generated scarcely any combustible or suffocating gases. In spite of all exertions it could not be brought to a flame, and the heat which it gave out was so little that we were able to hold our finger close to the spot exposed to the flame. It surpasses in this respect, although an organic body, several metals, the melting temperature of which is from 600° to 800°.

Comparative trials with other roofing materials employed until now, as for instance zinc, slate, felt, and tiles, confirm the destruction of these materials by the heat, and in a time when Hoff's wood showed but slight changes, and remained as hard coal after exposure to a long glow.

The various consequences, which the application of Hoff's wood will have upon building in general, space forbids us to enumerate, but we hope sincerely that since Hoff's wood has passed the ordeal by fire so well, showing itself to be an inestimable and indispensable building material, public authorities will have their attention drawn towards it, and make its adoption a law wherever security of life and property appear threatened by wood. After the day's labor we may then sleep without fear.

MILK CONDENSING IN SWITZERLAND.*

REPORT BY CONSUL BYERS, OF ZURICH.

In a recent report to the Department on "Swiss dairy thrift," I mentioned my purpose of forwarding, later, a paper on the subject of condensing and preserving milk in Switzerland.

Switzerland possesses at Cham the largest and most successful condensing concern in the world. Quite recently there has been discovered here in Switzerland, too, a new method of preserving milk without the addition of sugar or any other substance.

This new method is being practiced in Switzerland by the "First Alpine Milk Exporting Company," at Romanshorn. As the two milk-condensing factories mentioned are the principal ones of Switzerland—condensing the milk of many thousands of cows—and as the systems are entirely different, I will confine this paper to a description of their history and processes.

The "Cham milk-condensing factory" known as the "Anglo-Swiss," was established by my predecessor, United States Consul Page, in the year 1866. Since the foundation of the factory, the management has been in the hands of his brother, George H. Page. Its almost unparalleled success in the way of great sales and great dividends is the

*In No. 22 of these publications, there was published an interesting and valuable report upon "Swiss Dairy Thrift," of which Consul Byers desires the present report to be considered a supplement.—NOTE BY THE DEPARTMENT.

sufficient testimony as to his energy and his knowledge of the business he has in hand. There were many drawbacks at the commencement of the business. It was a new idea in Switzerland, even in Europe. The founders, too, were Americans and not Swiss; capital was lacking, and confidence in any success very weak. Condensed milk had scarcely been seen in Europe outside of a few ship-chandlers' stores, at seaports. True, the practice of condensing was not new wholly, for milk had been condensed on this same principle in France as far back as 1830, and in the United States as early as 1854, but the article had never achieved any commercial importance, and it had been sold only at prices usually demanded for patent medicines.

The Cham company commenced business with $12,000 paid in capital, and only $20,000 subscribed. In the first year it condensed but 22,800 cans of milk. In this present year, 1882, the working capital raised on stocks and bonds, and including the reserve fund, amounts to about $2,000,000, and some thirteen million cans of milk have been produced at the company's factory at Cham, while, with the branch concerns included, the total milk condensed in this year amounts to over 29,000,000 cans. The daily expenditures in the year 1882 for material and labor represent nearly $10,000, or a sum equal to nine-tenths of the paid-in capital of the concern in its first year's existence. Branch establishments of this Cham company exist in England and Germany, with offices for sales in London, Paris, and New York, and quite recently a branch factory has been opened at Middletown, in Orange County, New York. The following table gives the production of condensed milk in the company's different establishments during the years 1867 to 1882:

Cans of condensed milk manufactured.

Years.	In Switzerland.	In England.	In Germany.
1867	22,800		
1868	374,016		
1869	234,816		
1870	669,600		
1871	1,588,560		
1872	3,325,728		
1873	4,534,704		
1874	7,062,384	660,000	61,008
1875	6,225,840	3,424,256	1,668,960
1876	8,611,920	5,010,816	3,470,976
1877	10,148,976	4,840,704	2,211,792
1878	8,156,928	6,294,480	1,466,400
1879	10,662,912	8,162,784	2,168,736
1880	11,600,496	7,844,928	2,399,856
1881	12,425,520	11,192,400	2,949,936
1882	13,217,856	12,494,304	3,319,056

American enterprise and American money founded the condensed-milk business in Switzerland, and American men are still owners of the principal shares at Cham. An American is the general manager; and of the local managers, three are Americans, three are Swiss, and three are English.

There was little demand for the condensed milk previous to the Franco-German war of 1870, and the company had till that date an uphill struggle for mere existence. Even the Swiss, who could expect most from the success of the enterprise, could not be induced to subscribe for shares till the year 1873, when the company was producing four and a half million cans yearly.

METHODS OF THE BUSINESS IN SWITZERLAND.

The methods of manufacturing condensed milk at Cham are the same in every essential particular as are employed in America.

Swiss farms, especially in Canton Zoug and near to Cham, are very small, and were the dairies not very near together it would be an unsuitable place for a condensed-milk factory. For the factory at Cham crude milk is purchased from about 900 farmers. In my first report on "Swiss dairy thrift," I showed conclusively and by statistical statements the advantages of the Swiss methods of caring for milk cows. Also that they produced more and better milk than we do, and at enormously less cost for feed; that by spending money in caring for meadows and on comfortable stalling, they secure reasonable profits in spite of the fact that their lands are four times as dear as ours, and their cows twice as dear as our own. In short, that they produce more and better milk in Switzerland *on hay alone* than does New York or England with pedigreed cows and innumerable fantastic and unusual feeds. The Swiss peasant, unlike the great farmers of America, is usually unable to keep a horse and cart, and is therefore not able to deliver his small quantity of milk at the factory several miles away. The company furnishes the farmers with large cans in which the milk is brought to the factory. The farmers agree to place these cans at named points on principal roads, and the company contracts with teamsters to collect the milk along different routes, to bring it to the factory, and to return the milk cans after the same have been cleansed at the factory's works.

Farmers receive from 12½ to 14½ centimes per liter, equal to 2½ to 3 cents a quart, and are paid quarterly. The price fluctuates from year to year, according to the demand for cheese products.

The machinery employed is of Swiss make, excepting tin-can machinery, and that used in making packing cases, which comes entirely from America. Some minor utensils, however, are made by the company itself in its extensive repair shops.

The sugar used is imported from Holland and Germany. Tin plates are procured in England, and coal from Rhenish Prussia.

None but the best quality of labor can be employed in an industry of this nature. Such labor costs in Europe, as is well known, about one-half what it does in America; but as labor makes up but a small percentage of the cost of this product, the slight advantage accruing to such an industry in Switzerland from cheap labor cannot be considered important when offset by some disadvantages arising from transportation, expenses on material, like sugar, tin plates, and coal, which must be brought in from a distance.

The table of production, already given, shows conclusively that the business is moving out of Switzerland, or that its growth has for some years been taking place in England.

The managers of this business have discovered that crude milk is about equal in price in all countries where it is abundant; also, strange as it may appear, that crude milk is abundant in all countries where the demand is largest for the condensed article. They believe it advisable to carry on this industry in different countries, and in all countries where the consumption of condensed milk is sufficient to support one or more factories without depending upon exportation. Evidence of the sincerity of this opinion is shown in the fact of their recent commencement in America.

The explanation of milk being about equal in price everywhere, is

found in the fact that the value of any material usually fluctuates in harmony with the varying demand for the chief products of the same. The chief products of milk are butter and cheese. Improved facilities at the present day for cheap and rapid transportation induce a ready movement of butter and cheese from one country to another. Such distribution of the principal products of milk serves to regulate the value of crude milk in England, for example, as effectually as would be the case if England had its geographical position between the States of New York and Pennsylvania.

Another influence is at work to cheapen milk in Europe, or at least to materially increase its production. American competition in cereal products and in meat is rapidly converting England exclusively into a dairy country. The same result is noticeable in Switzerland and in Germany, where more and more acres are being converted into meadows.

Dairying in Europe will hold out against American competition the longest, because it will pay better than anything else, and it will exist always, because European soil cannot be abandoned as being in every way useless.

If American cheese goes to England, why may not Americans supply England also with condensed milk? The English farmer is not blessed with the conveniences of the American cheese-factory system, and therefore prefers to deliver his milk to a condensing factory, and thus save his wife and daughters the drudgery of cheese-making. England consumes a given quantity of milk and milk products taken together. If America should supply England with milk, it would diminish English demand for American butter and cheese.

MARKETS, &C.

The principal demand for condensed milk is found in England. A considerable quantity is exported to warm climates. Prohibitory duties prevent the exportation of condensed milk to Italy, Austria, Russia, and Belgium, and no one of these countries promises a sufficient market to support a condensing-milk factory within its own boundaries.

The Cham milk is usually sold at a small percentage above the cost of production; the profits arising from the extensiveness of the business. There has been no time within fifteen years when condensed milk could not be bought in London at very much cheaper prices than in New York.

It is obvious that this company would never have met with success if it had adopted the system of its American competitors of demanding a hundred per cent. profit on a common article of food, or had it, American-like, been impatient to secure a fortune before breakfast.

CONDENSING MILK WITHOUT SUGAR.

That milk could be preserved *without sugar* and sufficiently condensed to make it profitable for exportation has been, and still is, denied.

The "Alpine Milk Exporting Company," of Romanshorn, however, claims to have solved the problem, and to have discovered simple means by which milk may be reduced to at least one-third or one-fourth of its usual bulk, and be preserved indefinitely and without the use of sugar or any other substance.

Preserving milk without the addition of sugar is not quite a new process, or an unheard-of thing; but to reduce its bulk to an extent to make it practicable for distant transportation, is a task, which, if successfully

accomplished, would not only be new, but would be reckoned as one of the blessings of humanity. When *pure cows'-milk*, not milk and sugar, can be transported from country to country, another of the obstacles to cheap food in our cities will be overcome.

The methods heretofore practiced in the condensation of milk without sugar have mostly proved signal failures. There was either a bad taste to the condensed article, arising from chemicals used, or else it would not bear transportation.

That milk condensed and preserved by the addition of very large quantities of sugar is not as good as pure cows' milk, or as good as milk preserved without the addition of any foreign substance, every unprejudiced person must, of course, admit. In fact, there are many who cannot bear the taste of canned milk when sugar has been added, and there are instances on record where physicians have pronounced milk canned with much sugar as being injurious to the health of infants.

It has been estimated by high authority that 188 children out of every 1,000 die in their first year, and that from 40 to 70 per cent. of them die from want of nutrition suitable to infants. It is a remarkable illustration of the above, that in Bavaria the death rate among children, artificially fed, amounts to 89 per cent., while those reared on human milk average 11 per cent. only.

In view of such terrible facts, it is but natural that parents, the world over, should be anxious to secure that which shall, in fact, be the safest substitute for the mother's milk. That that substitute is to be found in cows' milk only, experience has long since shown; but experience has also shown that the cows' milk must in itself be healthy, pure, and unadulterated. To secure such in our large cities has, till now, except when condensed with sugar, been well-nigh impossible. If pure milk, produced from healthy, grass-fed cows, in the best milk regions of the country, can be preserved and condensed, and transported profitably and cheaply to our cities, then the problem certainly has been solved. The first Swiss Alpine Milk Exporting Company of Romanshorn claim that they can do this, and offer to do it at rates not so greatly above the prices now paid for common swill milk, blue with chemicals and bad water.

That milk condensed by their process contains only the elements of pure cows' milk; that it looks like milk, smells like milk, tastes like milk, and, in fact *is* cows' milk, and cows' milk only, is, it would seem, evidenced by analysis, and by the certificates of numerous European chemists, experts, physicians, and professors.

Prof. E. A. van der Burg, of Leyden, for instance, says of this milk:

> The problem of condensing and preserving milk without altering its original composition, either by the addition of sugar or other preservative substance, has been most satisfactorily solved.

Professor Wohler, privy counselor at Göttingen, says:

> The milk of this company contains neither sugar nor any substance, whatever, that might have been added for the purpose of preserving it. Its constituents are the same in proportion as those of best genuine milk.

The milk as condensed by this company represents a thick whitish-yellow liquid of pleasant taste and odor, and does not curdle when boiled. Its chemical composition, as analyzed, is as follows:

	Per cent.
Water	62.84
Caseine and albumen	11.39
Fat	11.11
Milk-sugar	12.03
Ash	2.24

The unskimmed milk of this company is, by their process, reduced three times, that is, to one-third of its original bulk, and can be returned to its normal quantity or bulk by adding as much water as has been taken off by condensation. A pint bottle of the condensed fluid will make thus three pints of best pure milk when water is added, and perhaps four pints and more of ordinary market milk.

It is put up usually in glass jars or air-tight tin cans, about the same size as the Cham cans, and weighing near to one pound each. With the glass jars, glass stoppers and rubber rings are wired on, making it impossible for air to enter. The tin boxes are cylinder-shaped, well made, and packed in wooden cases, four dozen to the case, weighing about 56 pounds.

It seems from what has been said that the single problem of condensing and preserving cows' milk *without sugar* has been solved.

But there is another question connected with this as important as itself. Will condensing milk to one-third of its original bulk only make it possible to transport it long distances with profit to the producer? If not, then condensing without sugar means a possibility of supplying near markets *only*, and the new system could never become a serious rival of the old. It reduces itself to a question of common freight. The milk can be condensed, as is proven, and it has preservative qualities, too, as experiments show in cases where it has been sent to tropical climates and returned to Switzerland in perfect condition.

The Swiss alpine factory commenced operations at the end of the year 1880, using about 5,000 liters of raw milk daily. The works have since been increased to a capacity of 30,000 liters daily, and, fortunately, the undertaking is supported by men sufficiently energetic to give this important industry a thorough trial.

The company furnishes the condensed milk at the railway station and by the car-load only. The prices are 25 francs per case of 48 cans, and 30 francs per case of 48 bottles. The retail price is left to the dealers. In Switzerland the retail dealers furnish this milk at about 14 cents a can. The Cham milk retails for about the same price.

Whether this new article can be profitably forwarded long distances and to other countries now remains to be proved. If proven in the affirmative, milk-consumers the world over will have reason to rejoice.

S. H. M. BYERS,
Consul.

UNITED STATES CONSULATE,
Zurich, November 27, 1882.

BUTTER EXPERIMENTS IN DENMARK.

REPORT BY CONSUL RIDER, OF COPENHAGEN.

I have the honor to transmit subjoined a report of a lecture delivered lately by Professor Fjord at the Royal Danish Agricultural Society of this city on butter yield with different dairy systems, and from cows of different breeds: 1st. The Angler and Jutland race; 2d. The Shorthorn and Jutland breed. The experiments were carried on by Mr. Lunds, the analysis in Stein's laboratorium by Professor Storch.

Professor Fjord opened his discourse with a short review of the extension of these experiments, of which he had been the leader during the last six years. The speaker explained how he had been led to this

through the application from certain parties concerning the storage of ice; but as a condition for giving such advice, it would be necessary that he should first have opportunities for making experiments at the same time on the ice consumption in the dairy. This led to his making in 1876 and 1877 experiments on cream setting and churning, carried out with the aid of dairy-acquainted assistants, and controlled by chemical investigation. The experiments seemed clearly to demonstrate that whenever there were skilfull and trustworthy dairy-hands employed in the dairy, and a sensible system of experiments was planned and followed out, then such a union of practical and scientific investigations would afford important information for practical dairy thrift. The existing list of experiments is a proof of this.

The experiments with the dairy systems at Rosvang, which commenced in 1879, and were to be completed shortly thereafter, have been forced to be carried on until now, and have been at the same time experiments as to breeds.

The necessary acquaintance with regard to the different breeds on which the experiments have been made has been as fully represented as it well could have been, inasmuch as an inspector has steadily attended the experiments and has always to discuss and accept plans for the mode of carrying on the work and especially in making a choice of the cows for the experiments, as also in regulating the fodder and grazing.

A. *Experiments with the Angler and Jutland breeds.*—Until 1879, the experiments with the four dairy systems were only carried on with milk from cows of the Angler breed. The results obtained from the different farms plainly showed certain irregularities, mostly apparent in a comparison between the butter yield from the ice and tub systems, and it was therefore desirous that other farms and districts should be brought under the experiments. It was of importance, by new experiments, to obtain greater certainty over the relations under which "heavy" milk is produced. With the "light" milk the difference in the butter yield, with an ice cooling relatively of ten and thirty-four hours, can be calculated at about 5 per cent., whilst that for the heavy milk rises to from 10 to 20 per cent. With the "light" milk the ice and tub systems can be reckoned as giving a like yield, when the milk in the tubs can be kept quite fresh for 34 hours, and likewise in both systems be skimmed after a repose of that duration. Should it, on the other, hand be so warm that it has to be skimmed at an earlier period, the tub system gives a less yield during the summer months. In 1879, at Rosenfeldt, in a good ordinary dairy cellar, there was from 2 to 12 per cent. less butter yield than with the ice system, whilst the yield at Ourup farm in 1880 and 1881 was closely alike, inasmuch as the milk kept completely fresh for one and a half days in a very good milk cellar, where the temperature of the floor was cooled with ice. If the milk becomes heavy, the tub system can, on the other hand, even during the summer, give a considerably larger butter yield.

There was, therefore, in 1879, a reason for investigations in other parts of the country, and especially of the herds of the Jutland breed in the western and northern districts of Jutland.

After communications with the Thylands Agricultural Society and their dairy adviser, the offer was accepted for removing the experiments to Rosvang, with 70 cows of Jutland and 115 cows of Angler breed. As Rosvang does not possess a normal condition of grazing, it was at the same time proposed to make experiments on other farms; but the proceedings at Rosvang assumed at once a satisfactory shape.

The mode of experiments was the same as before.

The milk of 200 freshly milked cows was to be divided into four equal parts for samples:

1. Strong ice cooling with skimming after ten hours.
2. The same after thirty-four hours.
3. Water cooling in water of 10° C., with skimming after thirty-four hours.
4. Wooden tubs, with skimming after thirty-four hours, or earlier should the milk commence souring.

It was determined that the experiments should be made by turns with Angler and Jutland milk, and that in the first instance no choice should be made of the cows or the grazing. The work was performed with the morning's milk because this ordinarily shows a commencing tendency to heaviness. The result was on the average of the experiments from the 2d to the 6th August, when the butter yield of ice, thirty-four hours, is put at 100; for ice, ten hours, 88.2; water, thirty-four hours, 90.3; and tubs thirty-four hours, 107.1. Tubs therefore yielded more than the strong ice cooling. With an experiment on the 7th August, with milk from Angler cows, the relative positions were as follows: Ice, thirty-four hours, 100; ice, ten hours, 91.9; water, thirty-four hours, 85; and tubs, thirty-four hours, 98.5.

The actual milk consumption for one pound of butter was, with tubs, 34 hours, the same for the Jutland as the Angler cows, 32.4 pounds; with ice, ten hours, on the other hand, very different, 39.3 and 34.8 pounds, and with ice thirty-four hours, somewhat less difference, 34.7 and 31.9 pounds. One was at first inclined to look upon this difference, as accidental or as owing to the Angler cows being tethered on a dry meadow, whilst the most of the Jutland cows, on the other hand, went loose in a wet meadow. There was now made a selection from ordinary cows, so that 30 Jutland and 40 Angler cows were removed to two neighboring pens, similar in regard to grass and moisture. The Jutland cows went about loose in the one and the Angler cows were tethered in the other. Such were the circumstances in the experiments from 25th to the 30th of August. At the close of these experiments a more select choice was made of 30 cows of each breed, as nearly as possible of the same age and calving time. Fifteen of the Jutland ones were removed to a pen in Angler and tethered, and 15 Angler ones were let loose in a Jutland pen, so that in each pen there were 15 Angler and 15 Jutland cows.

After their having been divided in this manner for a week, the experiments commenced the 6th and continued to the 21st of September. In the next series, 14th to 21st September, the change was made that all the cows were tethered and the Jutland received 2 pounds of wheat bran each. No further experiments with ordinary cows took place before the 31st October. All the cows were now at grass during the day, but about the half of each kind were stalled in the night from the 25th October, foddered with hay in the morning, and with barley straw in the evening. In the two next series of experiments, 7th, 13th 17th, and 23d November, all the cows were in stable. In addition, a series of experiments were made 22d to 25th September with milk from young cows at grass.

The results from these trials showed that the selection made of the cows and their removal to one kind of grazing in no way tended to diminish the heaviness of the Jutland cows' milk. Ice, thirty-four hours, gave in the experiments, 25th to 30th August, 13½ per cent. larger yield than ice ten hours, and tubs 13 per cent. larger yield than ice

of thirty-four hours. Likewise, in the experiments of 6th to 13th of September, the Jutland milk was seen to be equally heavy, and the same was the case in the experiments for 14th to 21st September, when the Jutland cows received an addition of strengthening fodder. The Angler milk, on the other hand, retained the same character in all the trials as in that obtained on the 7th August. A slight tendency to heaviness in the experiments of 25th to 30th August disappeared in the two following series of experiments. The same as in the former experiments in Zealand and on Falster, the Angler milk was slightly heavy in the list of 31st October to 5th November; but the Jutland milk far heavier, and considerably heavier than in September, and this was also the case in the lists of 7th to 13th and 17th to 23d November. In the list of experiments with young cows the Angler milk was slightly, but the Jutland milk very, heavy. The chemical analyses were throughout in general accordance with the experimental results.

In 1880 these experiments were again resumed with newly-calving cows. In the course of the summer a sufficient number of cows of each breed were put to grass on equal conditions, so that from these at the commencement of each experiment two selections of the same age and calving time could be made. In the list of experiments from 12th to 17th of August (see Table 1) the 22 Jutland and 24 Angler cows which were made use of had been loose and at grass in the same meadow during the whole of the summer.

The average age of the Jutland cows was 6.8, and of the Anglers, 7.1 years, and the medium calving time for each batch was first week in February. Previous to the experiments, 25th August to 3d September, the cows were removed to two neighboring inclosures where they were similarly divided in each and allowed to go loose. The average age of the Jutland was 7.8, and of the Angler 7.5 years, and the medium calving time for both batches in March. A part of the Angler herd was not removed, and the milk of ten of these was used in the tabular list denoted as "not removed." The difference arising from the removal can only be ascertained by further renewal of experiments.

TABLE 1.—*Ordinary cows.*

Rosvang, 1880.	Angler race. Proportional numbers for butter.			Jutland race. Proportional numbers for butter.			Number of experiments.	
	Ice, ten hours.	Ice, thirty-four hours.	Tubs.	Ice, ten hours.	Ice, thirty-four hours.	Tubs.		
March 18 to 30	94.4	100	99.2	95.7	100	100.5	6	Stall.
May 9 to 21	96.1	100	98.1	89.3	100	105.1	10	
August 12 to 17	93.6	100	98.6	88.7	100	107.7	6	
August 25 to September 3	94.7	100	94.3	86 3	100	114.8	7	Grass from April 24.
August 25 to September 3, not removed	.....	100	94.3	.....	.....	.....	4	
September 13 to 25	92.3	100	95.7	79.9	100	132.6	6	
October 2 to 10	.....	100	108.2	.....	100	133.3	8	Grass (chiefly) and stall.
November 6 to December 2	.....	100	130.2	.....	100	163.4	8	Stall.

POUNDS OF MILK TO POUND OF BUTTER.

Rosvang, 1880.	Angler race. Proportional numbers for butter. Ice, ten hours.	Angler race. Proportional numbers for butter. Ice, thirty-four hours.	Angler race. Proportional numbers for butter. Tubs.	Jutland race. Proportional numbers for butter. Ice, ten hours.	Jutland race. Proportional numbers for butter. Ice, thirty-four hours.	Jutland race. Proportional numbers for butter. Tubs.	Number of experiments.	
March 18 to 30	35.9	33.9	34.2	34.2	32.7	32.6	6	Stall.
May 9 to 22	30.6	29.4	30.0	38.4	34.3	32.6	10	
August 12 to 17	31.2	29.2	29.6	33.0	29.2	27.1	6	
August 25 to September 3	37.7	35.7	37.8	43.3	37.5	32.7	7	Grass from April 24.
August 25 to September 3, not removed	.....	29.7	31.5	.....	.....	.....	4	
September 13 to 25	36.6	33.8	35.3	31.1	51.8	30.8	6	
October 2 to 10	.....	31.1	28.7	.....	35.6	26.7	8	Grass (chiefly) and stall.
November 6 to December 2	.....	37.1	28.5	.....	43.0	26.3	8	Stall.

TABLE 2.—*Old and young cows.*

Rosvang, 1880.	Angler cows. Proportional figures for butter. Ice, ten hours.	Angler cows. Proportional figures for butter. Ice, thirty-four hours.	Angler cows. Proportional figures for butter. Tubs.	Jutland cows. Proportional figures for butter. Ice, ten hours.	Jutland cows. Proportional figures for butter. Ice, thirty-four hours.	Jutland cows. Proportional figures for butter. Tubs.	Number of experiments.	
April 16 to 22	.....	100	93.6	.....	100	98.7	4	Old stall.
April 12 to 15	91.5	100	98.8	83.8	100	109.9	4	Young stall.
August 23 to 24	.....	100	100.0	.....	100	128.5	3	Young grass.
September 9 to 11	.....	100	107.3	.....	100	119.1	4	Do.

POUNDS OF MILK TO POUND OF BUTTER.

April 16 to 22	.....	32.0	34.2	.....	34.3	34.7	4	Old stall.
April 12 to 15	38.9	35.5	36.0	48.9	40.0	37.2	4	Young stall.
August 23 to 24	.....	29.2	29.2	.....	37.9	29.5	3	Young grass.
September 9 to 11	.....	33.3	31.0	.....	36.2	30.4	4	Do.

The heaviness shown in the experiments in the Jutland milk cannot therefore be attributed to any difference in the fodder or grazing during 1880 of the Jutland and Angler cows; neither to the circumstance that a certain number of Jutland cows were accidentally introduced into the batch, and the milk had received from them this stamp of heaviness.

The tables 1 and 2 give the average figures of these experiments, relatively with "ordinary" and with "old" and "young" cows. The Angler milk has thus not shown any heaviness, before the cows, in October and November, became old milkers, whereas the Jutland milk, with the exception of the one list of March, had such a tendency all the time.

With tubs there was already 5 per cent. and from August to September 8.32 per cent. more butter than with ice in thirty-four hours, and the relative figures for ice in ten hours were from 10 to 20 per cent. be

low 100. In October and November the Angler milk was somewhat heavy, but the Jutland milk was much more so. There was consequently entire accordance between the experiments of summer and autumn, 1880 and 1879. The old cows employed in the experiment as per table 2 were of an average age; for the Jutland of thirteen and for the Angler of twelve and a half years. The young cows had calved one to two and in some few cases three times. From the table it will be seen that the young Jutland cows' milk has been decidedly heavy in the row of experiments carried on in April, August, and September. The Angler milk became heavy in September, but the Jutland milk at the same period much heavier. The milk from old cows in April was not heavy for either of the batches.

All the chemical analyses show a decidedly larger fatty substance in the skimmed milk of the Jutland than of the Angler cows, the same as in 1879.

In the beginning of 1881, 18 Angler and 18 Jutland cows were set apart, and with the milk from these, the experiments were continued from February to September.

The average age for both batches was the same, seven and a half years, and the calving time divided as equally as possible for both lots in the months of November and January.

Directly from October, 1880, these cows were treated in one and the same manner, and after the choice was made were placed in the same stall with the same feeding passage, the Jutland on the one side, the Angler on the other, and were also foddered at the same time and similarly. During grazing time, the 14th May, they were tethered in such manner, that in the same row there was placed by turns a Jutland and then an Angler cow, and in this way they grazed the whole summer until the close of the experiments. Already at the very commencement, shortly after the calving of the cows, was to be seen the same tendency to difference in the milk from the two breeds. As also with tubs the consumption of milk was greater with the Jutland cows than with the Angler cows, whilst trials with the controlling centrifuge showed there was not much difference in the fatness of the sweet milk. As the tubs thus could not afford any correct measure of the milk's heaviness, one passes over to the centrifuge experiments. The result of these experiments from April to September, 1881, is given in the following table:

TABLE 3.

Rosvang, 1881.	Angler cows.			Jutland cows.			Number of experiments.
	Proportional figures for butter.			Proportional figures for butter.			
	Ice, thirty-four hours.	Tubs.	Centrifuge.	Ice, thirty-four hours.	Tubs.	Centrifuge.	
STALL.							
April 8 to 9	100		112.0	100		128.4	2
April 23 to May 11	100	104.1	114.0	100	108.4	127.7	12
Grass from May 14							
May 15 to 21	100	102.9	107.9	100	107.2	116.4	10
June 24 to 29	100	98.8	106.6	100	103.7	118.0	6
July 14 to 21	100	98.2	107.8	100	104.8	121.5	6
August 22 to 26	100	101.4	113.6	100	117.3	139.1	6
September 1 to 4	100	106.0	118.1	100	117.6	138.5	6

POUNDS OF MILK TO POUND OF BUTTER.

Rosvang, 1881.	Angler cows. Proportional figures for butter.			Jutland cows. Proportional figures for butter.			Number of experiments.
	Ice, thirty-four hours.	Tubs.	Centrifuge.	Ice, thirty-four hours.	Tubs.	Centrifuge.	
STALL.							
April 8 to 9	32.1	.....	28.6	38.1	.....	28.9	2
April 28 to May 11	31.0	29.8	27.2	35.2	32.5	27.6	12
Grass from May 14.							
May 15 to 21	22.7	22.1	21.1	24.5	22.9	21.0	10
June 24 to 29	28.0	28.4	26.3	31.0	29.9	26.2	6
July 14 to 21	27.7	28.2	25.7	30.7	29.3	25.2	6
August 22 to 26	26.0	25.6	22.8	32.5	27.7	23.4	6
September 1 to 4	27.7	26.1	23.5	33.5	28.5	24.2	6

Together with these experiments, some responding experiments were made with milk from Engebaksund, from which place the milk was driven to Rosvang, where it arrived warm, also at Marselisborg near Aarhus. At both places Angler and Jutland cows are kept, and at the latter place the meadow grazing is normal. There was observed at both places the same accurate attention in the choice of the cows and foddering, and in both places the results for the milk of the two breeds was the same as at Rosvang.

The results of the controlling experiments with the chemical analysis confirm, namely, that by the centrifuge experiments it has been possible to separate the cream equally as well in the Jutland milk as in the Angler, and which, especially at Rosvang, was not the case with the tubs. Should it still be confirmed by subsequent experiments, the same as has hitherto been the result, it would then appear that the centrifuge will permit even in the dairies themselves to carry on equally sure experiments for the explication of the agencies that have an influence on the richness of the milk, as well as by means of the experiments which have hitherto been carried on for the purpose of ascertaining in what way the different dairy systems influence the yield of butter.

B. Shorthorn and Jutland breeds.—At Vestervigkloster, in Thy, the proprietor has erected roomy localities where experiments have been made in 1880 and 1881 with milk:

A, from the herd of the farm consisting of 31 cows of Shorthorn race; B, from Vejlegaard's herd of 28 cows of the Jutland breed; C, from several small farms with herds of 10 to 20 cows of Jutland breed; and D, from Gaardhusmill with a herd of 17 cows of Jutland breed. The milk from B, C, and D was driven about one-quarter mile (Danish), and arrived thus at the dairy about equally as warm as the farm's own milk from the distant grass fields, especially in 1881, when the milk was carried in packed reservoirs. From the communicated tables over the experiments it will be seen that the Shorthorn's milk in May and July was as normal as possible. The difference in the butter between ice 10 hours and ice 34 hours was only 3 to 5 per cent., and tubs gave less than ice thirty-four hours. The Jutland milk was, on the other hand, from all the farms, heavier than at Rosvang in the same summer.

The water trial was unfavorable for the milk from all the cows. All

the farms had good meadow grazing fields, and the calving time was somewhat before rather than after the 1st of January. In 1881 the experiments were resumed at Vestervigkloster on the same plan as at Rosvang and at Marselisborg with trials of centrifuge (De Laval's) instead of ice ten hours. The Shorthorns and Jutland had the same properties as in 1880, and the centrifuge trials make this more clearly evident, inasmuch as they show that the Shorthorns milk in ice cooling has the cream separated more fully than from the Angler milk in the ice dairy's most favorable season, as with the centrifuge 2 to 4 per cent. more butter than with ice in thirty-four hours has only been obtained. The analyses confirm the correctness of the experiments and show that Shorthorns milk is the one that most easily and fully surrenders its cream.

Table 4 contains a resumé of the leading results of the communicated experiments (summer experiments), and table 5 an average of the thereto belonging chemical analyses.

Proportionately many of the analyses of milk from Angler and Jutland cows were from September, but a shutting out of these would, however, only cause a small diminution in the average figures.

These experiments have thus gone out upon an investigation of the milk's properties of cream separating.

Proportional figures for butter.

Farms.	Angler or Shorthorn race.				Jutland race.			
	Ice, ten hours.	Ice, thirty-four hours.	Tubs.	Centrifuge.	Ice, ten hours.	Ice, thirty-four hours.	Tubs.	Centrifuge.
Rosvang:								
August 2 to September 21, 1879	92.0	100	98.9	.....	87.1	100	110.4	.....
May 9 to September 25, 1880	94.2	100	96.8	.....	86.5	100	114.0	.....
May 15 to September 4, 1881	.....	100	101.5	110.7	.....	100	109.7	126.0
Egebaksande:								
May 27 to August 30, 1880	.....	100	94.6	104.8	.....	100	108.1	118.3
Vestervigkloster:								
May 27 to July 20, 1880	96.2	100	95.0	.....	90.7	100	110.3	.....
June 27 to September 15, 1881	.....	100	95.1	102.5	.....	100	112.4	123.7
Marselisborg:								
August 8 to September 19, 1881	.....	100	98.7	111.3	.....	100	104.2	119.0

TABLE 5.—*Average of analyses.*

May to September, 1881.	Per cent. fat in skimmed milk.						
	Ice, thirty-four hours.			Centrifuge.			
Vestervigkloster and Vejlegaard farms.	0.30	.....	1.25	0.17	.....	0.22	De Laval centrifuge.
Vestervigkloster, Vejlegaard, and other farms.	0.32	....	1.15	0.16	.....	0.18	
Rosvang	.....	0.71	1.13	.....	0.16	0.14	Neilsen & Petersen's centrifuge.
Egebaksande	.....	0.50	1.17	.....	0.08	0.07	
Marselisborg	.....	0.57	0.76	.....	0.10	0.12	
For all farms	0.31	0.59	1.06	.....	0.11	0.11	

TABLE 6.—*Yield of one cow, in pounds, during twelve hours.*

Average.	Proportion of milk.		Proportion of butter. Ice, thirty-four hours.		Tubs.		Centrifuge.	
	Angl.	Jutl.	Angl.	Jutl.	Angl.	Jutl.	Angl.	Jutl.
Rosvang, all eight rows	100	95.7	100	84.2	100	89.6	100	95.1
Rosvang, six rows (February to July)	100	100.2	100	90.0	100	94.4	100	100.3
Egebaksande	100	91.0	100	86.6	100	98.8	100	97.5

But some of the experiments have, however, been carried out in such a manner as to assist in forming a judgment of the butter yield from all the milk which the cows engaged in the trials have given whilst the experiments were being carried on. The calculation over the results in this respect were only made at Rosvang during the period 4th February to 4th September, and at Egebaksande 27th May to 30th August, when the two batches of experimenting cows were treated in precisely one and the same way.

The lecturer was desirous of cautioning the agriculturists from the results of these experiments of drawing too hasty conclusions as to the properties of the two breeds for production of butter beyond the periods embraced in the experiments and the animals whose milk was employed.

From the experiments it will be seen that it is only by a careful use of the centrifuge system that the consumption of milk to 1 pound of butter in practical dairy drift can be made a sure basis for determining the fatness of the milk. In the experiments at Rosvang, February 3 to September 4, 1881, the proportions between Angler and Jutland milk were on the average as follows: When the butter yield from Angler milk is placed at 100 with all three systems, the Jutland milk gave for ice thirty-four hours 88.0, for tubs 93.8, and with centrifuge 99.2. Thus, with the ice system the Jutland milk has given 12 per cent. less butter than the Angler milk; with the tub system 6.2 per cent., and with centrifuge system only 0.8 per cent. (= a difference of 0.2 pounds milk to 1 pound butter). The milk of both breeds has thus in fact, with few exceptions, been equally fat. At Egebaksande the proportions for Jutland milk were, on the other hand, with ice thirty-four hours, 94.6; with tubs, 108.2, and with centrifuge 106.7. Here, therefore, the Jutland milk has been the richest. That the tubs show a larger yield for Jutland milk arises from the fact that now and then there was "cheese in the cream" of Angler milk.

On the whole the assistants would appear to have learned that like faults in the milk show themselves most frequently in Shorthorns, less frequently with Angler, and least of all with Jutland milk. In weighing off all the milk from the two batches of experimenting cows each day by itself, and of the obtained butter yield, it is calculated how much each of the employed cows on an average has yielded (Table 6). Whilst the Jutland in the beginning had the advantage and the Anglers towards the close, the Anglers on the whole have had an advantage of 4½ per cent. in the milk quantity, which may be considered the real proportional difference. With the use of the centrifuge system the Angler cow has only had a slight advantage over the Jutland, whilst with the ice system a considerable.

Whether these results can be looked upon as binding for the milk proportions of the two breeds can only be established by general experiments; but that an answer can be given from the used method is clear; as also that these may be used in other trials of importance to practical dairy thrift. If this can be carried out will depend, amongst other things, whether such experiments can be looked upon as regards their cost as responding to economical benefit to dairy thrift and if the proprietors will continue to place their dairies at disposal for the purpose.

In conclusion, I beg to present for the information of our agriculturists at home some necessary reservations with reference to the foregoing experiments in dairy thrift by Professor Fjord, namely, that in clearing the ground for an enlightenment of the subject I shall first of all premise that the leading views on the breed of domestic animals move in two opposite directions. According to one view, it is the working of nature through climate, soil, and vegetation in conjunction with man's intervention and labor, namely, what is embraced under the name of care, which alone forms and maintains the breeds; according to the other, that the races are originally constituted with special attributes, in parts produced in some incomprehensible manner, which is hereditarily continued. The first view is entertained by scientists, the latter has its chief hold with the larger part of the agriculturists; and the antithesis is so diametrical, that when the one lights a beacon to enlighten our path, the other naturally becomes a Will-o'-the-wisp.

I shall likewise next premise, in clearing the ground, that milk is not solely a separation of the blood's contents, but a dissolving in the first instance of the formed texture of the udder; from this follows, that the milk retains the character of the whole body's nature, and follows the variations this may undergo. In the latter instance it is almost exclusively the fodder that determines the character of the texture, though not immediate, but through the already formed texture; and experience shows that when the animal is brought under extraneous conditions the already acquired character will, in a measure, show itself, not only during the animal's lifetime, but even down to several generations, as also that the actual existence in the new conditions may offer an infinity of intermediate points.

It is therefore in nature that each race should present a special construction of body, and likewise a special character of milk as reflecting therefrom, so long as it continued to exist under the conditions in which they are furnished. But when they are brought under other conditions, a break immediately takes place and an inclining towards the native breed under its new conditions, but with an endless degree of shading.

The comparison between milk of different breeds is, therefore, very enlightening, when the milk of each breed is taken in its native countries. When a comparison is instituted between the milk of intermixed breeds, it must in reason be presupposed that the before-mentioned starting point is observed, and the problem to be solved can only be to what extent the foreign breed has yielded of its original character and taken that of the new; it is the habits of the race which are mainly altered; a like break will also hold good, even without a change of home having taken place.

Now, when it is taken as a guide from the experiments that the milk of cows of the Jutland breed, experimented upon at different farms in various parts of Jutland, presents that condition which is denominated by agriculturists as "heavy," so must "breed" here only denote that

the peculiar nature and feeding conditions (as also other treatment) under which the Jutland cattle have in course of time been formed, exercises such extraordinary effects on the bodily construction of the cows.

But as such a result doubtless must appear wonderful, especially as it seems to be opposed to what one thought to know of the milk-yielding of the Jutland cows, and of their connecting types, so it must, at the same time, afford strong grounds for ascertaining if the experiments really justify the drawn conclusions, and whether one should not have overlooked some peculiar influences, which by themselves in a more natural manner (that is to say, more in accordance with the hitherto acquired knowledge) could explain the phenomenon. It is thus immediately made manifest that it has already failed in the necessary trials with regard to the proposed comparisons between the foreign breeds, because it is evident that if really the Jutland life conditions produced the above-named effects, then they must, in a more or less degree, exercise their influence in the same direction on the imported individuals or families.

A careful criticism could not have overlooked the importance of such a counter experiment, and would thus have discerned the necessity of a third series of comparisons, namely, with relation to the yield of the foreign breeds in their own native homes.

It is more than probable that such a comparison would have shown that the foreign element had not exercised any considerable influence; but such a negative result would, in such case, have aroused an entitled doubt as to how far the cause had been sought for in its proper place in attributing it to "breed."

It is evident that with this experiment sufficient care should have been taken to place all the experimenting animals of undoubted breed on different farms. They seem to have overlooked the fact that the old Jutland cattle breed (that is to say those which, at present, for centuries have been created under Jutland's existing conditions, exposed to only unimportant variations), is at present in complete decay; in some places having been crossed, in others, especially where the selection was made of the cows used in these experiments, in a complete state of transformation from the old middle form to something quite different, namely, to a real milking race.

This transformation can in a way be compared with that where the English agriculturists have developed the Shorthorns from the old Yorkshire breed, and is fully as serviceable as this one; but it is quite unavoidable that such a rapid stride of development must encroach seriously on the whole life's character, especially where it so strongly concerns a transgression of the aims of nature.

But even if such a result should appear somewhat prosaic as opposed to the lyrical tone wherewith the lecture of Professor Fjord was brought to a close, it will nevertheless not be without its value, especially when it may be hoped that the hint which is therein contained, that milk at all times shows a tendency to "heaviness" when the term for a natural milk yield is transgressed, may be employed towards bringing forward experiments which, like those of Dr. Bohr, propound the problem of demonstrating the actual cause of milk's heaviness, whether it is to be accounted for in the smaller size of the butter globules or from the condition of the milk serum, or in both conjointly. According to the laws of science the solution must, without doubt, be sought for in that which is common for the cases observed, namely, the irregularity in milk formation from a forcing of the yield, both in regard to extent and time.

The fact that agriculturists seem so often to think that they can stop

short in their researches without injury to their productive power may be the reason they always stand far behind other branches, notwithstanding that they together have a common root in the same natural sciences.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, Denmark.

PAPER AND PAPER PLANTS OF MEXICO.

REPORT BY CONSUL-GENERAL STROTHER.

I have the honor to forward a report on paper in the Republic of Mexico, with some notes in regard to the trade in that article, as also some remarks concerning the fibrous plants of the republic.

PAPER FACTORIES IN MEXICO.

There is probably no country in the world which surpasses Mexico in the abundance and variety of its fibrous plants proper and adaptable to the manufacture of paper, yet the exorbitant cost of this important agent of modern civilization, affecting, as it does, the prices of books, newspapers, and all kinds of printed and written productions, may be regarded as a serious impediment to the general education and enlightenment of the people of the republic.

As early as the year 1829, an American named Benfield established a paper mill near the city of Mexico, which is still in prosperous existence.

There are twelve paper factories now in the republic, distributed in six different States, and producing an aggregate of about 25,000 pounds daily. This product is chiefly of the commoner qualities of wrapping paper, newspaper sheets, with white and colored sheets for placards and posters. The proportion of the finer qualities of book and writing paper is very small. The wholesale prices are as follows:

	Per pound.
Common wrapping paper	$0 10
Common for newspapers and printing	$0 20 to 25
Superior quality for same	25 to 30
Common colored paper	15 to 20
Best stout	25
Writing paper (in small lots)	25 to 30

An addition of 10 per cent. to the foregoing will represent the average retail prices.

The wholesale prices named above give the manufacturer an average net profit of 25 per cent. on the cost of production.

The materials used are rags, refuse cotton, waste paper, palm fiber, and "ixtle," or maguey fiber, in small quantities.

About 30 per cent. of the paper consumed in the republic is of domestic manufacture. The remaining 70 per cent. is imported from France, Germany, Italy, Spain, and the United States.

FOREIGN PAPER IN MEXICO.

The duties on foreign papers are as follows, per kilogram:

Straw and racking paper	$0 07
Marbled, glazed, and colored, for bookbinders	77
Tissue, white or colored, gross weight	19
Vellum	17
Printing, gummed or half gummed, gross	10
Cap and half cap, ruled or plain, gross weight	29
Cigarette paper, gross weight	29
White or colored letter or account paper, ruled or unruled, with or without gilt edges	43
White and colored drawing paper and bristol board	43
Wall paper, gilt, silvered, or velvet	14
Wall paper, common and colored	10
Albumen paper, for photography and other uses	43
Engraved or lithographed paper, for wrappers, labels, &c	43
Gilt or silvered paper, for ornament	20
Paper ruled for music	24
Blotting and copying paper	13
Waterproof paper, for copying books	7
Porcelain or enameled paper	43

As the Mexican tariff has been adjusted on the French system of weights and measures, and the values are stated in Mexican currency, I have given them as they appear in the original, to avoid the interminable and infinitesmal fractions, a necessary consequence of translating the figures into United States currency, weights, and measures.

The kinds of paper chiefly imported from foreign countries are ordinary, fine and superfine letter; fine and superfine for periodicals and books; drawing paper, of varieties; white and colored fancy; for manifests; for cigarette wrappers.

SPANISH PAPER IN MEXICO.

The Mexican consul at Barcelona, in Spain, furnishes the following statement of papers exported from that port to the Mexican Republic in 1881:

Description.	Quantity.	Value.
	Pounds.	
White, ruled	1,713	$242
Fine white	28,918	2,811
Writing	3,872	631
Cigarette	606,338	125,221
Wrapping	16,317	472
Colored and vellum	410	85
Total	652,568	129,462

MEXICAN PAPER MATERIAL.

In reply to inquiries made by certain parties in France relative to the fibrous and textile plants of Mexico available for the manufacture of paper, the Mexican commissioners, appointed by the government, reported the following:

1st. The various species of the maguey plant (the sap of which furnishes the national beverage, pulque), which grows to gigantic size, and whose leaves contain a quantity of tough fiber which may be readily bleached and converted into paper.

2d. The varieties of plantain, grown in the warm districts, chiefly for

the shade they afford the young coffee plantations, and whose stocks and voluminous leaves furnish a very fine and white fiber in great abundance.

3d. Tule, a tough rush, commonly used by the Indians for weaving mats, floor covers, baskets, and chair-bottoms, which is found in unlimited quantities in the fresh-water lagoons in the valley of Mexico and elsewhere in similar table-lands, and which is very rich in paper-making material.

4th. The sugar-cane, cornstalks, wheat, rye, and barley straw are also available for the same purpose.

5th. Various plants of the "Malvacea" family are also worthy of attention, especially the "alacle," found in the State of Morelos, whose long, white, and abundant filaments attracted so much notice in the Exhibition of 1876 at Philadelphia.

6th. The "*Masahual hibiscus*," abundant on the Gulf coast, and the "huinare," very common in the State of Michoacan, with many other plants of the same class, are also worthy of mention.

7th. There are, besides, numerous plants of the Cotton family, the "*Bizuagas mamillaria*," and the "*Cacteas*," that cover the mountains of Cardonal, Mezquital, and other localities.

8th. The "pochote" (*Eriosendron anfractussum*), of the family of the "Bombaceas," whose seed is inclosed in fine silken filaments resembling cotton.

9th. The "cuanlahuac" (*Heliocarpus americanus*), of the family of the Tiliaceas, growing in the states of Morelos and Pueblo, and whose cortical fibers are remarkable for their beauty.

10th. Indigenous Urticeas of divers species, such as the common nettle of the Valley of Mexico, *Urtica divica*, besides several species of Bromeliaceas, notably the *Bromelia sylvestris* of Tehuantepec.

11th. The "pastles" or "henos" (Tilandsia), the izotes of the Siliaceas, extremely abundant in the State of San Luis Potosi and elsewhere on the elevated plains of the interior states.

12th. Finally, the different species of palms of the Tierras Calientes, especially the hat palm (Chamacrop's), which has an exceedingly tough and fine fiber.

In brief, Mexico, with its wonderful varieties of soil and climate, appears to be the favored home of filamentous and textile plants, many of which grow spontaneously like wild weeds, covering large districts of country, to be had simply for the gathering, while those requiring cultivation with the advantage of cheap lands, cheap labor, and abounding fertility may be produced at prices which defy competition.

The general revival of internal and external commerce, the progress of free schools and popular education, the proposed reforms in the postal service, increasing mail facilities, and lowering the postal charges, all indicate an immense increase in the demand for paper in the immediate future.

These causes, with the high prices and protective tariff, have already stimulated the Mexican manufacturers to undertake competition with foreign fabrics by increasing the quantity and improving the quality and finish of their home products; but with all the advantages at command many years will probably elapse before Mexican industry will be enabled to meet the rapidly increasing demand for this elementary food of a progressive civilization.

DAVID H. STROTHER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
City of Mexico, November 13, 1882.

TRADE AND INDUSTRIES OF MAZATLAN.

REPORT BY CONSUL KELTON.

The statement of receipts of the custom-house of this port shows an increase of $306,000 in duties received on imports during past fiscal year.

Exports have largely increased, particularly in bullion and specie; but owing to a lack of a public statistical department at this custom-house the exact data are not easily obtainable.

Confidence in the strength and stability of the present government has increased owing to the fact that there has been no general revolution since the inauguration of this administration, and trade has consequently improved and bids fair to continue doing so.

TARIFF.

Several increases have been made in the tariff during the year, but a revision of it has been lately authorized to simplify the calculation of duties at least; the abolition of the export duty on gold and silver coin and mineral ores is to take place November 1, and it is believed that the long desired measure will greatly benefit the commercial and mining interests and further their development.

AGRICULTURE.

Although this state (Cinaloa) is prominently devoted to mining, it nevertheless possesses rich valleys capable of producing most of the cereals; although outside of maize or corn, its principal products hitherto have been sugar-cane, cotton, and tobacco. The outlook this year for the farmer is very unfavorable, there having been, so to speak, no rainy season, which fact has occasioned the loss of the entire corn crop in this district.

The price of this staple has notably risen in the market to the great distress of the laboring classes, whose chief aliment is the "tortilla." It is more than probable that California will have to supply this state with corn, beans, and vegetables until the gathering of next year's crop

MANUFACTURES.

There is as usual nothing worth mentioning in this branch of indus, try in this consular district; no new enterprises have been commenced and the few existing ones do not show any great success.

There are in this district three cotton mills, confined to the manufact-, ure of unbleached cloths, which cannot give large profits, as most of the cotton worked is brought from the neighboring states, and in some cases has had to be imported from New York. There are several sugar factories, but none on a large scale; the article is not exported, as the price it obtains here is about double the market quotation for it in San Francisco, which is the natural port for exports from this State. In this city there is a manufactory for matches, brooms, and ice. one gas-gas-works, and two machine shops and foundries.

FINANCES.

There has been no abatement in the taxes levied, but it is believed the financial condition of the state has improved and no extra tax is likely to be levied, as has happened heretofore. Funds have been voted for the improvement of the road between the state capital (Culiacan) and Cosala, a prominent mining district.

The credit of the federal government has never been as high as it is at present, as is proven by its ability to obtain a loan of several millions at 4 per cent. per annum, and by the punctuality with which up to the present time it has been able to meet the increasing drafts upon the treasury for the payment of railroad subsidies.

Heretofore the merchants have obtained a discount of from 7 to 10 per cent. upon moneys advanced to government on account of duties on goods to arrive, and in many instances such moneys would be advanced but a few weeks or even days before the cargo was due. This year all that has been changed, much to the disgust of the merchants, accustomed during so many years to the former system. This year the government thus far has appeared to need no aid from the merchant, but on the contrary has requested him to pay in cash the amount of his duties as soon as due.

It is, however, impossible to predict with any degree of certainty the financial future of Mexico, as the railways will undoubtedly become an important factor to the problem, with the $90,000,000 of subsidies to be paid under their existing charters by a government whose annual revenues at the present time do not exceed $20,000,000, based on the import duties mainly.

MINES.

The prospect is encouraging for the introduction of considerable American capital in the mines of this state, owing to the fact that most of the investments made during the past five years have been effected with prudence and sagacity, and the profitable returns thereof are a powerful argument in favor of Sinaloa mines. Some years since no capitalist could be found to invest in Mexican mines; but time and the present period of peace and confidence in the continuation of it have made great changes in this respect.

The port of Mazatlan is still the same unsheltered harbor as ever, no appropriation having been made by the general government for the improvement of it, although it ranks as the second port in the republic.

The prospect of railway communication from this port is more encouraging; for several years nothing has been done toward the commencement of actual work on the roads of the several concessions. It is believed work will be commenced before the end of the year on the railway from this port to Durango.

In the city a new line of horse cars has been laid and the telephone system with a central office has been established, both private enterprises, managed or owned by Americans.

The number of Americans in this consular district has slightly increased by an accession of miners and mechanics mostly. No strictly American business house has been established, and the few existing have not increased in importance.

EDWARD G. KELTON,
Consul.

UNITED STATES CONSULATE,
Mazatlan, Mexico, November 11, 1882.

THE MERCHANT MARINE OF EUROPE.

REPORT BY CONSUL CRAIN, OF MILAN.

ITALIAN SYSTEM OF NAUTICAL SCHOOLS.

In view of the general desire that Congress should pass some practical and comprehensive measure for the resuscitation of our merchant shipping, I believe it will be opportune to direct attention to certain features of proved utility in the laws and administration of some of the maritime nations of Europe.

In the system devised in 1860 for the Italian commercial marine a serious and well-directed effort was made to awaken and encourage a spirit of maritime enterprise in the people, and especially to attract the youth of the middle and higher classes to seafaring life. To this end it was decided to raise the standard of intelligence and efficiency in the *personnel* of the service by the establishment of nautical schools with a severe curriculum, and rigid trial examinations for aspirants to the several grades. Proceeding upon the assumption that the dignity of every calling is measured by the degree of knowledge and culture essential to its pursuit, the founders of this system aimed to ennoble the merchant service and render it an attractive and honorable career by the exaction of the highest qualifications. In this way it was believed, and rightly believed, that a considerable portion of the young men of the country who otherwise would seek the overcrowded professions of the law and medicine, the army and navy, would enter these technical schools, and in course of time the nation would possess the services of a numerous and trained body of navigators, skilled in the handling of ships, conversant with foreign languages and the ways of trade, and thoroughly fitted to pioneer and extend Italian commerce. The system was also made to embrace special schools of naval construction and steam machinery situated near the large ship-yards and machine shops so as to make the alumni practical adepts and afford the employés in those establishments an opportunity to profit by the schools. In furtherance of the general object above stated it was enacted in the code of the mercantile marine of 1865 that no one could command a merchant ship unless holding a patent from the minister of the marine, and which could only be obtained after a service at sea prescribed for the grade, and a successful examination in matters formulated by the minister. Similar provisions were enacted as to ship-builders and first and second engineers of steamships.

Article I of the royal decree of January 30, 1873, declares:

Technical instruction for those who intend to dedicate themselves to navigation, to maritime arts, and industries is provided—

I. In the superior naval schools for engineer, naval constructors and captains of long course.

II. In special schools of naval construction for naval constructors of the first class.

III. In special schools of steam machinery for first and second engineers.

IV. In the nautical institutes for captains of grand coasting.

V. In those nautical schools and institutes designated by royal decree for naval constructors of the second class.

The duration of the several courses is as follows:

Special school of naval construction, three years.

Special schools of steam machinery, four years for first engineer and two years for second.

For captains of long course, three years; and two years for captains of grand coasting.

The examination for admission to the superior naval school is upon Italian literature, the French and English languages, physics, general chemistry, elementary mechanics, descriptive geometry, differential and integral calculus, and drawing.

By the decree before mentioned, the matters to be taught in these schools, and on which examinations must be passed by aspirants to the several grades of the mercantile marine, are as follows:

For engineer naval constructors.—Italian literature, English language and literature; industrial and commercial economy; maritime law; mechanics, rational and applied to machines in general, and to the resistance of materials; marine steam engines and drawing; naval construction, practical and drawing; naval architecture.

For superior captains.—Italian literature; English language and literature; industrial and commercial economy; maritime law; commercial geography; physical and meteorological geography; navigation, nautical instruments, and calculi; principles of land surveying; topographical and hydrographical drawing; nautical astronomy and elements of celestial mechanics.

For naval constructors of first class.—Italian literature; English or French language (optional); elements of maritime law; elementary algebra and theory of progressions and logarithms; plane and solid geometry; plane trigonometry; descriptive geometry; elementary physics and mechanics; steam-engines and their application to ships; naval constructions, materials which should be used for them, and the theory of ships; naval architectural drawing and accessories.

For first engineers.—Elements of Italian language and literature; French or English language (optional); Italian history; geography; mental arithmetic; elementary algebra, and theory of progressions and logarithms; plane and solid geometry and drawing; physics and elementary mechanics; machines in general, marine steam-engines, and duties of engineers; materials used in machines and combustibles; linear drawing; drawing of machines.

For captains of long course.—Italian language and literature; French or English language (optional); Italian history; geography; commercial and maritime law; mental arithmetic; elementary algebra and theory of progressions and logarithms; plane and solid geometry; plane trigonometry; navigation and principles of hydrography; linear drawing and principles of hydrographic drawing; spherical trigonometry; astronomical geometry and nautical astronomy; principles of physics and of mechanics applied to navigation and meteorology; steam-engines; naval maneuvering.

For captains of grand coasting.—Italian language; French or English language (optional); Italian history; geography; commercial and maritime law; mental arithmetic; elementary algebra; plane geometry; notions of trigonometry; navigation reasoned; principles of nautical astronomy, and practical nautical calculations; ship maneuvering.

For naval constructors of second class.—Italian language; elements of maritime law; mental arithmetic; plane and solid geometry; naval construction; designs for naval construction.

For second engineers.—Italian language; mental arithmetic; elementary algebra; plane geometry; elementary physics and mechanics; steam-engines, materials used in machines, combustibles, and duties of engineers; linear drawing, and of machines.

The examination for the patents of engineer naval constructor, of

naval constructor of the first and second class, and of first and second engineers, is conducted by a mixed commission of three members, nominated by the ministers of agriculture, industry, and commerce, and of the marine. That for the patents of superior captain, captain of grand coasting, is divided into two experiments, one at the superior school, the institute or nautical school; the other at the port captaincy.

The expenses of these nautical institutions are divided between the government at Rome and the province and town in which they are situated. One hundred and twenty young men were admitted to the nautical institute at Leghorn last month, and the attendance in the other maritime towns is yearly increasing.

There are too many grades in the Italian merchant service; but independently of this the system of commissioning only those to command merchantmen who have completed in government schools an established course of technical education and passed prescribed trial examinations, not only secures officers properly qualified, but draws men and capital to the service. It is also evident that schools of naval construction so situated and equipped as to afford the best advantages of practical and theoretical instruction are expensive, and must be liberally encouraged by the state. Ship-building has now reached that stage in which the problems presented can only be dealt with by the highest attainments of science. By thoroughly supporting such schools the United States will produce types of ships which by their excellence will counterbalance all disadvantages in cost of construction and running expenses. Such schools are also a powerful agent in directing capital and enterprise to maritime industries.

ENGLISH AND FRENCH REGULATIONS.

The English admiralty as early as 1853 established a regulation by which the owners or builders of merchant steamers, by complying with prescribed rules as to strength, structure, speed, &c., could have their ships registered so as to give them priority of employment by government in time of war.

The French Government, by decree of August 31, 1881, accords an additional navigation premium of 15 per cent. to merchant ships built in France in compliance with plans to render them available for war purposes. These regulations are simple, and in the case of England have been advantageous. The official proposals have been accepted by many of the first English ship-builders, and a considerable number of strong and swift iron steamers have been built so as to permit of their equipment for war purposes.

The original aim was to protect English commerce from the swift cruisers of an enemy. The general transformation from wooden to iron ships has given an unforeseen value to the plan. Iron steamers of the modern type have a solidity suited to the carriage of the heaviest ordnance, and such ships can not only protect themselves and convoy others, but can contend with iron-clads less heavily armed.

The admiralty are at the present time establishing in their colonial stations depots of armament to be received by these ships in emergency to obviate the necessity of a return to England for that purpose. Supplied with ships of this class the iron-clad fleet is free to defend home ports, blockade the enemy's, and look after hostile iron-clads. It is not improbable that in the next war in which England shall be engaged with a maritime power her most formidable aggressive power will be found in these armed merchantmen.

RAILWAYS AND OCEAN STEAMERS.

The Italian minister of public works having been asked how the internal railway tariffs could be co-ordinated with the interests of Italian navigation, replied, December 29, 1881, as follows:

The internal railway tariffs are nearly identical as to rates and the modes of their application. The differences complained of result from diverse special tariffs; and against this I shall be able to provide definitely by the unification of all the Italian railway tariffs which for a year past has been made a special study. To this end the special tariffs will be arranged with simplicity, and on the basis of distances run without distinction of lines. The reduction of rates is a complex question and will depend upon the expenses and the advantages which will result to the national economy.

It has been pertinently asked of what use are bounties to Italian ship-building and navigation if unreasonable railway tariffs are to drive European merchandise and passengers over foreign roads on to foreign ships? And conversely, if such tariffs are to force the goods of America and Asia through foreign ports on to foreign roads? These points have a special application to the mercantile marine of the United States. The commercial navy must have its real base at home ports and be nourished by home products; and no project for the revival of our shipping will be perfect which does not embrace the internal transportation of the country. We have no state built or state managed railways, and want none; but we do need and should insist upon that degree of supervision as to freights by the government necessary to protect the industries of the country and promote its merchant service. The principles of political economy have not as yet been adjusted to the change wrought by steam locomotion. Iron ways are after all but highways, and are now practically the only means of land transportation. Their control is an indispensable right of the people; and if existing roads cannot by reason of vested rights be supervised by the people's agent, the government, others should be provided that can be. The agricultural and industrial interests of the country are too vast to be jeopardized by the capricious action of railway companies. Railway "wars" of rates waged at a ruinous loss to the companies to-day, to be recouped out of the public to-morrow, should no longer be permitted. Reasonable and equable rates, admitting of a steady and uninterrupted movement of our great staples to the ports, are essential to the sustenance of our commercial marine and the security of our markets in Europe. Economy of carriage must begin at the point of production, and continue to the place of final destination. The zone of consumption of American products is enlarged or diminished by the action of our railway companies. Ships are but a link in the chain. There must be co-ordinate railway and ship supervision.

DUNHAM J. CRAIN,
Consul.

UNITED STATES CONSULATE,
Milan, November 25, 1882.

FRENCH SEA FISHERIES.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

A statistical report is published annually by the navy department of the French government on the sea fisheries of France.

The report for the year 1881, which has only recently appeared, presents some very interesting facts.

The number of people engaged in French maritime fisheries in 1881 was no less then 136,360, and the value of the fish caught amounted to 82,500,000 francs, or, in round numbers, to $16,500,000.

Compared with the exhibit of 1880, some important differences are to be noted.

On the one hand sardines were not so abundant, and there was a decrease of 962,500 pounds in cod, herring, mackerel, and anchovies, which gave a total yield of 288,630,000 pounds.

On the other hand, oysters, mussels, and other shell-fish show an increased production.

Fishermen sold 230,433,000 more oysters than in 1880.

Though the yield of cod was less in quantity, the prices obtained were for this very reason in excess of those of the previous year, the excess in value amounting to $279,464 out of a total yield of $1,521,226.

The general yield of the fisheries was, however, inferior to that of 1880 by $819,671.

There was a decrease also of 1,909 fishermen, 611 boats, and 8,492 tons.

The French fisheries of Newfoundland, of all these others, and in spite of the unfavorable weather during the month of August, gave the largest production.

The commander of the station there refers particularly to the happy results obtained by the employment of the filets called *trappe*. This net is employed independent of seines and lines and enables the crews to make large "catches" without much exertion. It occupies, besides, those who would otherwise be idle when the weather is too stormy to permit of ventures on the open sea, or when fishing with ordinary tackle would prove unsuccessful. The employment of these *trappes* is strongly recommended.

In spite of the great storms which caused considerable losses to the crews, the herring fisheries on the coast of Iceland resulted splendidly as to "catch," but the simultaneous return to French ports of the boats affected prices, and the result proved advantageous only to the great wholesale fishers.

The sardine fisheries were unfavorable. Appearing late upon the coasts, their stay was too brief to be fruitful in results. In some places they did not appear at all.

The Belait seines continue to give great satisfaction, and their use is becoming general, especially in the Douarnenez district.

Though scarce in product the price of sardines did not advance, owing to the same causes as with the herring fisheries, simultaneous return of the fishers, and overcrowding of the market in consequence. There was a loss of $1,158,000 to the sardine fishers in comparison with the year 1880, which, in itself, was a poor season.

The foregoing facts apply to salt-water fish.

The fresh-water yield was abundant in quantity but feeble in prices, making a loss over the previous year of $156,909.

Great improvements are signalled in fishing apparatus. In the west the fishermen have replaced their old boats by chaloupes of a tonnage capable of better resisting the dangers of the deep open sea, and this investment in superior working capital has been amply repaid by largely increased profits.

Fisheries with *chaluts* (pocket-nets dragged at the bottom of the sea) and cords have been fairly successful. Nearly all this class of fishermen (*chalutiers*) now take supplies of ice on board, and can thus carry on their work on the coasts of England, Belgium, and even Holland.

Oyster fishing deserves special mention on account of its largely increasing development and consumption.

In 1880 the oyster product amounted to 144,000,000, valued at $250,900.

In 1881 the capture exceeded 375,000,000 of oysters, selling from first hands for $405,300, an increase in value of the product of $154,400, and this result, though oyster-fishing was prohibited by the government in the waters of Saint Malo, Paimpel, and Marennes.

The districts of the Isle d'Oléron, Pauillac, and La Ferte contributed principally to this large increase.

Pauillac gave only Portuguese oysters, but the yield was so abundant that prices ruled very low.

Parks or artificial oyster-raising gave excellent results. The district of La Ferte exported alone 216,000,000 of oysters reared in her parks, yielding $831,058.

The total amount of oysters sold in 1881 were 680,000,000, bringing the sum of $3,474,000!

This figure represents very near 50 to 60 cents the 100, or of from 5 to 6 cents the dozen. These were the wholesale prices. Considering, now, that these oysters are sold at Paris and Lyons for 25 to 45 cents the dozen, some idea of the extent of the business and profit may be formed.

Oyster parks have proved so successful and profitable that they are increasing from year to year.

In 1880 there were 41,000 oyster parks in France, covering a surface of 27,000 acres.

In 1881 this number was increased by 2,056 new parks, and 800 more acres. Oyster culture, as it will thus be seen, has become an important industry in France; in fact, oysters are now all but essential in a French diet, and their cultivation is consequently constantly increasing and proving more and more productive.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, December 9, 1882.

LINEN INDUSTRY OF BELFAST.

REPORT BY CONSUL WOOD.

In my report on the linen industry of this consular district (practically embracing the whole North of Ireland), it seems desirable to show the amount of the production of flax in Ireland, and of the importation of flax and tow from other countries for use in the manufactures of the district. The supply of flax, which lies at the foundation of the industry, is all important, and is carefully noted and reported by the general government. The principal production is found in the province of Ulster, in the north, which embraces nine counties, and in which is the seat of the large manufactures.

The following table shows the acreage in flax for the province of Ulster, by counties, for the years 1880 and 1881, and of the remaining provinces, and for England, Scotland, and Wales:

Counties and provinces.	Acres under flax, 1880.	Acres under flax, 1881.
Armagh	15,885	16,012
Antrim	18,333	17,663
Cavan	9,726	8,807
Donegal	14,391	11,835
Down	31,454	28,047
Fermanagh	3,490	3,323
Londonderry	18,791	18,939
Monaghan	16,659	15,687
Tyrone	24,268	23,509
Total for the province of Ulster	152,997	143,822
Province of Connaught	1,239	884
Province of Leinster	2,157	1,688
Province of Munster	1,147	691
Total for Ireland	157,540	147,085
England	8,788	6,410
Scotland	182	111
Wales	15	13
Total for the United Kingdom	166,525	153,619

The proportion of the acreage under flax to that of all other crops is shown by the following table, by provinces, for the year 1881:

Provinces.	Acreage under all other crops.	Acreage under flax.
Connaught	705,240	884
Leinster	1,439,374	1,688
Munster	1,267,292	691
Ulster	1,779,455	143,882
Total for Ireland	5,191,361	147,145

The production of flax fiber in Ireland for the year 1881 has been obtained by careful inquiry, and is shown in the following table as compared with the year 1880, together with the production in England, Scotland, and Wales:

Provinces.	1880.			1881.		
	Acres under flax.	Pounds per acre.	Produce in tons.	Acres under flax.	Pounds per acre.	Produce in tons.
Connaught	1,239	390.60	216.00	884	484.12	190.05
Leinster	2,157	418.60	403.08	1,688	538.16	405.54
Munster	1,142	487.20	248.38	691	405.86	125.20
Ulster	152,996	346.08	23,640.06	143,822	418.32	26,863.33
Total for Ireland	157,534	410.62	24,507.52	147,085	461.61	27,584.12
England	8,788	.....	1,648.29	6,410	.....	1,202.27
Scotland	182	.....	34.12	111	.....	20.81
Wales	15	.....	2.81	13	.....	3.06
Total for United Kingdom	166,519	.....	26,192.74	153,619	.....	28,810.26

The crop of flax for the year 1881, promised while growing a heavy yield. It turned out, however, in a measure desceptive, and the expected yield was not realized. The quality is described as generally medium, and the prices obtained were not above the average.

The table next given shows the yield per acre for the province of

Ulster, by counties, and for the remaining provinces for the years 1880 and 1881.

Provinces and counties.	Yield per acre, 1880.	Yield per acre, 1881.
	Stones.	*Stones.*
Antrim	27.67	27.59
Armagh	24.62	32.07
Cavan	27.06	32.30
Donegal	24.69	26.09
Down	23.73	32.91
Fermanagh	22.01	26.90
Londonderry	22.40	28.14
Monaghan	25.26	30.19
Tyrone	24.75	29.13
Average for the province of Ulster	24.72	29.88
Connaught	27.90	34.58
Leinster	29.90	38.44
Munster	34.80	28.99
For all Ireland	24.89	30.01

The following table shows the acreage under flax in Ireland for the years 1870 to 1881, inclusive, with the yield per acre in stones, and the yield in tons.

Years.	Acreage under flax.	Yield per acre.	Tons.
		Stones.	
1870	194,893	29.24	35,617
1871	156,883	13.80	13,610
1872	122,003	24.81	18,918
1873	129,432	25.15	20,345
1874	106,886	28,91	19,913
1875	101,248	32.87	20,800
1876	132,878	28.20	23,420
1877	123,362	28.57	22,028
1878	111,808	31.15	21,768
1879	128,004	24.51	19,611
1880	157,534	24.89	24,508
1881	177,085	30.01	27,584

In connection with the cultivation of the flax it becomes desirable to ascertain the quantity of flaxseed imported into Ireland. The following valuable table on this subject shows the amount of such imports for the years 1867 to 1881, both inclusive:

Years.	Riga barrels (3¾ bushels).	Dutch hogsheads (7 bushels).	English sacks (4 bushels).	Total in bushels.	Sufficient to sow.	Average sown.	Price.		
							Ex. pto Riga per barrel.	Dutch per hogshead.	English per quarter.
					Acres.	*Acres.*	*s. d.*	*s. d.*	*s. d.*
1867	98,470	16,591	5,792	483,950	241,975	253,257	42 02	101 10	74 00
1868	45,580	19,414	7,608	325,860	162,930	206,446	61 07	102 01	90 09
1869	95,996	23,111	8,975	533,663	266,831	229,178	41 08	88 09	78 03
1870	61,877	15,600	3,880	340,969	170,484	194,893	41 00	84 06	72 00
1871	82,094	17,983	7,569	443,486	221,743	156,883	40 00	82 06	76 00
1872	41,105	8,125	6,682	227,470	113,735	122,003	42 00	95 00	80 00
1873	42,222	15,577	4,966	276,680	138,340	129,432	41 06	100 00	88 00
1874	34,439	13,668	1,832	223,548	111,770	106,886	36 06	77 09	76 00
1875	23,855	17,844	472	210,288	185,144	101,248	38 00	77 06	.....
1876	49,532	17,164	1,097	297,898	148,949	132,878	37 08	89 08	.....
1877	32,377	18,000	1,283	244,451	122,225	123,362	39 00	79 00	82 00
1878	28,092	12,252	2,142	192,654	96,327	111,808	45 00	95 00	85 00
1879	48,404	14,828	3,200	286,010	143,005	128,004	40 00	115 00	84 00
1880	66,732	10,017	2,045	311,861	155,930	157,534	36 06	110 00	81 00
1881	61,961	16,130	188	330,525	165,262	147,085	31 06	70 00	.....

The foregoing tables show the acreage and production of flax in Ireland and in the United Kingdom for the years 1880 and 1881. To hese amounts, in order to set forth the consumption in the manufacture of linen goods, should be added the imports from all sources and the amount of the exports. These imports and exports will be found in the two following tables, which give the quantities for the eleven years ending with 1881, and the countries from which the importations were made:

Imports of flax, dressed and undressed, and tow, into the United Kingdom during the years named, together with the countries from whence imported.

Years.	Belgium.	France.	Germany.	Holland.	Russia.	Other countries.	Totals.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1871	16,905	831	12,197	8,794	86,164	4,462	129,353
1872	15,872	584	9,656	6,696	66,401	1,839	101,048
1873	16,546	563	10,922	8,356	72,394	990	109,771
1874	14,388	732	7,160	12,876	82,702	846	118,704
1875	13,818	645	4,893	8,768	60,097	476	88,697
1876	11,576	427	2,164	4,944	50,944	237	70,292
1877	16,016	760	8,509	7,306	78,348	375	111,314
1878	12,880	115	4,880	4,768	54,181	856	77,680
1879	14,252	623	2,611	6,922	59,738	609	84,755
1880	12,257	673	3,996	4,105	72,233	1,572	94,836
1881	11,316	.....	3,206	5,095	68,150	1,321	89,088

Exports of flax, dressed and undressed, and of tow, from the United Kingdom to the several countries named, for the years 1871 *to* 1881, *both inclusive.*

Years.	Belgium.	France.	United States.	Other countries.	Totals.
	Tons.	*Tons*	*Tons.*	*Tons.*	*Tons.*
1871	126	2,563	689	1,797	5,175
1872	1,093	2,552	1,608	538	5,791
1873	1,194	617	1,073	349	3,233
1874	1,224	1,507	1,395	481	4,607
1875	837	2,064	1,115	332	4,348
1876	289	769	740	444	2,242
1877	.....	708	1,003	656	2,367
1878	100	1,189	724	649	2,662
1879	150	909	1,712	507	3,278
1880	193	386	2,211	496	3,286
1881	.....	.....	.....	.....	2,767

The results of the two foregoing tables may be summarized in the following table, which exhibits the net supply of flax and tow for consumption in linen manufactures for the years 1880 and 1881:

	1880.	1881.
	Tons.	*Tons.*
Irish production	24,508	27,584
British production	1,398	1,226
Foreign imports	94,836	89,088
Total supply	120,742	117,898
Deduct exports	3,286	2,767
Net supply for consumption	117,456	115,131

The following table is interesting as showing the acreage devoted to flax cultivation in other countries than the United Kingdom. The table also shows the quantity raised per acre in pounds:

Countries.	Statute acres.	Pounds per acre.	Tons.
Austria	225,244	426.44	42,881
Belgium	140,901	470.26	29,580
Denmark	6,292	280.00	787
Egypt	15,000	280.00	1,815
France	169,430	510.86	38,641
Germany	319,396	525.98	75,057
Greece	957	280.00	119
Great Britain	6,534	420.14	1,226
Hungary	29,089	426.44	5,538
Holland	48,095	454.72	9,762
Italy	200,356	256.62	22,953
Ireland	147,085	420.14	27,584
Russia	2,000,000	280.00	250,000
Sweden	33,639	280.00	4,205
Total for Europe	3,342,018		510,148

In connection with the linen weaving and manufactures, it becomes desirable to know the number of spindles and power-looms in use. The two following tables show respectively the number of each in use in Ireland, England, Scotland, and Wales, and the aggregate in the principal countries of Europe:

1. *Number of spindles and power looms in the United Kingdom for the years named.*

Years.	Spindles.			Power-looms.		
	Ireland.	England and Wales.	Scotland.	Ireland.	England and Wales.	Scotland.
1861	592,981	344,308	279,385			
1864				8,187		
1871	866,482	269,768	317,085	14,509		
1874	880,559			19,331		
1875		291,735	275,119		5,624	18,529
1876	920,677			20,152		
1878	918,182			20,638		
1879	906,522	190,808	265,263		4,081	16,756
1880	912,011			21,163		
1881	879,835			21,177		
1882	873,242			21,779		

2. *Table of the number of spindles and power-looms in the several countries named.*

Countries.	Spindles.	Power-looms.
Austria and Hungary	380,440	500
Belgium	306,040	4,755
Denmark		70
England and Wales	190,808	4,081
France	500,000	22,000
Germany	318,467	8,600
Holland	7,700	1,200
Ireland	873,242	21,779
Italy	59,223	772
Norway	1,800	120
Russia	160,000	3,000
Scotland	265,263	16,756
Sweden	3,810	98
Switzerland	9,000	
Spain		1,000
Total for Europe	3,075,793	84,731

The following table exhibits the exports of linen yarns from the United Kingdom for the years 1880 and 1881, with values, to the several countries named:

To—	Quantities.		Value.	
	1880.	1881.	1880.	1881.
	Pounds.	*Pounds.*		
Belgium	1, 140, 000	1, 629, 500	£107, 394	£125, 619
France	947, 100	1, 527, 200	122, 167	182, 164
Germany	2, 130, 600	2, 476, 500	203, 001	209, 165
Holland	2, 520, 300	2, 488, 100	120, 215	102, 364
Italy	823, 900	936, 700	45, 776	51, 904
Spain	6, 838, 000	6, 552, 600	291, 382	280, 212
United States	1, 239, 100	1, 141, 970	39, 295	32, 414
Other countries	838, 500	1, 582, 930	49, 088	73, 330
Totals	16, 477, 500	18, 285, 500	978, 318	1, 057, 172

The table that follows shows the declared value of the exports from the United Kingdom of linen manufactures of all kinds for the five years ending with 1880. The figures for the several countries are not complete for the year 1881, but the total value of the exports for that year was £5,843,929.

Countries.	1876.	1877.	1878.	1879.	1880.
	Value.	Value.	Value.	Value.	Value.
Austria	£7, 451	£8, 474	£9, 038	£9, 187	£5, 128
Argentine Republic	34, 357	77, 554	64, 236	47, 510	41, 747
Australia, New Zealand, &c	316, 591	382, 582	430, 989	306, 152	345, 756
Belgium	47, 714	47, 621	47, 368	40, 310	46, 267
Brazil	167, 116	150, 864	165, 651	152, 040	141, 013
British North America	204, 587	212, 127	186, 495	150, 460	230, 060
British West Indies	66, 182	59, 384	49, 503	56, 570	54, 622
British Guiana	29, 310	16, 202	11, 209	10, 790	12, 484
British India, Ceylon, &c	76, 957	95, 320	98, 611	78, 012	85, 545
China	12, 562	17, 218	24, 843	24, 203	14, 927
Chili	20, 344	26, 751	23, 080	15, 231	32, 895
Cape of Good Hope and Natal	43, 584	32, 096	47, 397	68, 534	42, 502
Denmark	55, 953	48, 345	42, 472	44, 423	44, 867
Danish West Indies	30, 943	30, 516	35, 966	28, 950	13, 627
Egypt	19, 589	12, 537	43, 649	15, 751	15, 532
France	443, 875	444, 139	314, 045	244, 210	133, 375
Germany	485, 426	387, 836	385, 321	417, 020	299, 246
Greece	7, 204	5, 409	6, 616	6, 167	4, 911
Gibraltar	12, 302	6, 850	9, 779	4, 466	3, 087
Hayti and St. Domingo	65, 004	54, 098	44, 390	21, 148	81, 492
Holland	57, 026	51, 575	44, 179	46, 240	45, 506
Dutch Possessions	19, 487	30, 869	32, 813	22, 594	33, 125
Italy	116, 322	106, 404	116, 890	96, 380	99, 399
Japan	6, 128	20, 189	21, 999	12, 804	9, 056
Mexico	55, 653	109, 026	71, 532	48, 310	68, 864
Montevideo	21, 003	35, 107	17, 189	15, 450	25, 859
Norway	47, 133	60, 892	35, 153	34, 100	35, 946
New Granada (United States of Colombia)	84, 055	82, 010	78, 469	60, 988	63, 616
Portugal	38, 227	36, 569	39, 233	28, 890	34, 759
Portuguese Possessions	1, 944	680	1, 408	1, 185	1, 706
Peru	17, 727	23, 760	25, 239	12, 048	4, 798
Russia	56, 950	31, 221	109, 209	120, 977	111, 107
Spain	95, 921	91, 566	88, 448	96, 120	109, 617
Spanish West Indies	323, 380	299, 637	285, 479	264, 923	215, 406
Other Possessions	36, 083	74, 206	26, 670	28, 403	41, 254
Turkey	38, 414	19, 544	138, 487	48, 015	18, 432
United States	2, 198, 581	2, 379, 325	2, 102, 381	2, 596, 330	3, 031, 241
Venezuela	68, 799	63, 317	48, 644	42, 815	31, 219
Other countries	190, 752	202, 623	211, 196	155, 421	156, 026
Total	5, 620, 636	5, 834, 443	5, 534, 776	5, 473, 127	5, 836, 019

It now remains to show what proportion of the exports of linen manufactures was made to the United States. In the year 1880 (the latest year for which the returns are complete), it appears that the total value of such exports to all countries was £5,836,019. The distribution was as follows, viz:

United States of America	£3,031,241
Foreign countries	2,030,722
British Possessions and dependencies	774,056
	5,836,019

The following table shows the value of linen piece goods imported into the United States for the five years ending with 1881, from all countries, distinguishing the value of the importations from the United Kingdom:

For the fiscal years ending June 30—	Imports of linen piece goods from all countries.	Imports from Great Britain and Ireland.	Imports received from other countries than the United Kingdom.
1877	£2,301,979	£2,118,339	£183,640
1878	2,298,151	2,059,208	238,943
1879	2,363,529	2,125,282	238,247
1880	3,731,844	2,537,976	1,193,868
1881	2,555,343	2,540,588	14,755

The following table shows in like manner the value of the total imports of flax manufactures (not enumerated) into the United States for the same years (1877–1881):

For the fiscal years ending June 30—	Imports of unenumerated flax manufactures from all countries.	Imports from Great Britain and Ireland.	Imports from other countries than the United Kingdom.
1877	£481,201	£170,614	£310,587
1878	584,569	181,645	402,924
1879	575,239	224,073	351,166
1880	766,437	275,809	490,628
1881	676,492	277,621	398,871

The following table combines the two preceding tables, and shows the total value of the imports into the United States from all sources of manufactures from flax for the same years (1877–1881):

For the fiscal years ending June 30—	Total value of imports of flax manufactures into the United States.	Total value of flax manufactures imported from the United Kingdom to United States.	Total value of supply from other countries than the United Kingdom.
1877	£2,783,180	£2,288,953	£494,227
1878	2,882,720	2,240,853	641,867
1879	2,938,768	2,349,355	589,413
1880	4,498,281	2,813,785	1,684,496
1881	3,231,835	2,818,209	413,626

The table below given is interesting as showing the total quantities and declared values of the exports of linen manufactures (including thread), the price per yard of piece goods, and the price per pound of thread, for the years 1861 to 1881, both inclusive, from the United Kingdom:

Years.	Plain and white linen.			Printed, checked, or dyed damasks, diapers, &c.		Linen thread.		
	Quantities.	Value.	Value per yard.	Quantities.	Value.	Quantities.	Value.	Value per pound.
	Yards.		*Pence.*	*Yards.*		*Pounds.*		*Pence.*
1861.....	110, 124, 998	£3, 287, 269	7. 16	2, 617, 576	£107, 614	2, 390, 461	£267, 746	26. 88
1862.....	144, 786, 131	4, 128, 220	6. 84	7, 046, 349	264, 804	3, 909, 062	429, 034	26. 34
1863	166, 800, 042	5, 245, 985	7. 55	8, 525, 131	345, 962	4, 256, 630	527, 105	29. 72
1864.....	189, 194, 145	6, 614, 284	8. 39	14, 333, 308	598, 934	3, 978, 321	492, 194	29. 69
1865	221, 073, 183	7, 426, 531	8. 06	18, 683, 051	717, 080	3, 934, 922	558, 444	34. 06
1866.....	232, 837, 903	7, 981, 743	8. 23	15, 998, 705	659, 438	3, 784, 849	511, 398	32. 43
1867.....	198, 175, 721	6, 431, 059	7. 79	8, 244, 454	334, 427	2, 753, 859	342, 959	29. 59
1868.....	197, 635, 508	6, 173, 898	7. 50	8, 887, 854	344, 902	2, 676, 960	318, 230	28. 53
1869.....	204, 658, 286	6, 022, 230	7. 06	7, 131, 957	268, 211	2, 186, 806	269, 364	29. 56
1870.....	210, 405, 228	6, 271, 734	7. 11	12, 405, 841	421, 178	2, 378, 631	283, 028	28. 55
1871.....	207, 041, 820	6, 377, 010	7. 39	9, 296, 124	311, 538	2, 902, 376	345, 581	28. 57
1872.....	233, 838, 336	7, 241, 338	7. 43	7, 397, 940	233, 736	2, 661, 732	317, 566	28. 85
1873.....	195, 404, 195	6, 204, 800	7. 62	8, 197, 598	260, 639	2, 302, 354	293, 187	30. 56
1874.....	180, 926, 285	5, 876, 864	7. 79	8, 987, 132	287, 754	2, 690, 059	337, 907	30. 15
1875.....	186, 763, 770	5, 904, 958	7. 59	13, 742, 124	470, 295	2, 757, 886	353. 576	30. 77
1876.....	146, 666, 075	4, 365, 072	7. 14	13, 181, 129	449, 918	2, 638, 131	349, 549	31. 79
1877.....	159, 274, 650	4, 597, 665	6. 92	14, 411, 156	471, 982	2, 447, 091	301, 889	29. 61
1878.....	147, 499, 700	4, 423, 879	7. 20	9, 719, 600	299, 204	2, 395, 200	285, 415	28. 60
1879.....	149, 661, 000	4, 414, 302	6. 60	6, 559, 700	200, 396	2, 829, 000	350, 215	29. 71
1880.....	156, 689, 600	4, 818, 841	7. 31	4, 987, 600	150, 182	2, 878, 400	372, 078	31. 02
1881.....	165, 045 500	4, 836, 582	7. 03	5, 499, 800	161, 115	2, 587, 100	329, 934	30. 61

The export of linen manufactures from this consular district for the year ended September 30, 1882, has presented no unusual features. Both in quantity and value they were a fair average for the past ten years. The volume of these exports may be said to be uniform, with perhaps a small increase when the average of some years is taken. There is perceptible, also, an increase in the exports of linen goods to the United States from other countries, and it would appear on examining the statistics that while the quantity consumed in the United States is yearly on the increase, the quantity supplied from the United Kingdom is not in proportion to that supplied from other sources.

In the early part of the year there was an exceptional export of potatoes, in consequence of the shortness of the crop in some sections of the United States. In other respects no feature of any special interest appears in the trade of the district for the year.

It may be remarked that linen manufacturers complain of the low prices obtained for their goods in the United States, and ascribe the fact in part to overproduction, especially in certain lines. It is observed, however, that reference is made in all comparisons to the exceptionally prosperous times during the late war in America and a few years succeeding, when a very large increase took place in the number of mills, and of the limited companies for the manufacture of linen goods. There is reason to believe that in the manufacture of the finer linens no other country can successfully compete with those of Ireland. Germany already is a rival in the coarser manufactures, and it seems probable, with equal advantages in machinery and labor, that she will continue to increase her exports in linens of this quality. But it is doubtful that the climate will admit of the finer.

The consumption of linens of all grades in the United States increases slowly each year following the growth of population. There can be

little doubt that this volume would not be seriously affected by even a considerable rise in prices.

The small return upon capital, of which complaint is made, results rather from the closeness of competition and the necessities of a part of those engaged in the manufacture than from want of a market in the United States.

A. B. WOOD,
Consul.

UNITED STATES CONSULATE,
Belfast, November 6, 1882.

INDUSTRIES OF DUNDEE.

REPORT BY CONSUL WELLS, FOR THE YEAR ENDING SEPTEMBER 30, 1882.

LINEN TRADE.

The following table shows the import of the raw material into Dundee, during the years mentioned, required for this branch of industry:

Years.	Flax.	Tow and codilla.
	Tons.	*Tons.*
1871	39,391	11,544
1872	34,053	6,583
1873	32,732	6,145
1874	36,074	7,778
1875	22,572	6,500
1876	21,413	5,563
1877	33,256	10,709
1878	22,153	5,462
1879	24,381	5,812
1880	31,617	9,175
1881	27,996	9,407
1882*	23,004	8,136

* From June 1 to September 30, 1882.

This table shows that the imports are in excess in proportion of last year, but it is not expected that the quantity will be much above the average at the year's end.

Flax freights have been moderate this year; quotations being, from Riga to Scotland, $5.75 per ton; from Cronstadt, $5; and from Archangel, $8.

The reports about this year's flax crop is on the whole unfavorable; the yield, it is expected, will show a large falling off as compared with last year, and the quality on the average inferior.

The prices for flax have gradually fallen during the past year. They touched a low point in February, and continued so until September, when they began to rally again; but they are still considerably lower than at this time last year.

A merchant here showed me some beautiful samples of flax grown and prepared in the United States, which he said were of the finest quality and could command the highest price in the market. He expressed astonishment that our farmers were not more interested in the growing of flax fiber for manufacturing uses. No less than 10,000,000 acres of flax were sown last year in the United States. But the crop was used almost entirely in the production of seed for the making of oil

and feeding cake, and most of the fiber was burned or destroyed. Only a comparatively small quantity was used for upholsterers' purposes and as paper stock. Why should so much valuable material be wasted which might be prepared and utilized? The imports of raw flax last year into the United States amounted to 5,500 tons and cost $1,500,000. America could surely be a self-supplying, non-importing nation already, so far as this article is concerned. I beg to direct the attention of our farmers and manufacturers to the subject.

There has been an increase in value of $278,402.57 this year over last year in the linens exported from Dundee to the United States. The trade during the year has been fairly steady and manufacturers generally better employed than last year, as both home and foreign inquiries have been more active. There has been, however, little alteration in prices. Fabrics have been on the whole firmer, and yarns easier, in sympathy with the fall in flax.

The demand at present for linens is not extensive, but considered sufficient to carry off most classes of goods as produced. There is a want of animation in the sail-cloth branch of the trade, which has been the case more or less during the year. Manufacturers are disappointed with the want of orders from the United States. They relied on a good fall trade being done this year, but their expectations have not been so fully realized as they anticipated. Hopes are entertained that the bountiful harvest in America will leave a large surplus of money to be expended on domestic linens. The United States hitherto have generally imported the cheaper class of household linen goods, but within recent years there has been a marked advance in the quality sent from here. A large lot of the most superior sheetings, table-cloths, napkins, and towels are now consigned, and, I am informed, are finding ready sale. One linen manufacturer, only of best qualities, has told me that his exports to the United States have increased in value $75,000 this year over last year. Seeing the fall trade has not turned out so well as was anticipated a good spring trade is looked for.

PAPER STOCK.

During 1881 the price of this article in the United States fell very much and consequently retarded shipments. This year values have improved and encouraged export, so that the amount sent has increased $16,421.26 over last year. More dealers have engaged in this trade in 1882 than previous years. Some of these gentlemen have visited America, and they intend to make United States business a special branch of their trade, as they think our country furnishes a large outlet for certain grades of paper stock.

SHIP-BUILDING.

Dundee has fully shared in the prosperity that has attended this branch of industry in this country during the past year or two. In 1881 11 vessels, of 18,945 tons, were launched here, and in 1880, 15 vessels, of 15,621 tons. Thus it will be seen that though in 1881 there were fewer ships, the size of the vessels was so much greater that their combined tonnage exceeded by 3,324 tons the total of 1880. The following is a—

Statement of the number of vessels launched at Dundee, Scotland, for years mentioned.

Years ending December 31—	Launched.	
	Number of vessels.	Tonnage.
1871	11	9,400
1872	13	13,049
1873	10	9,293
1874	11	11,165
1875	23	14,998
1876	23	15,356
1877	18	12,135
1878	12	11,121
1879	14	12,384
1880	15	15,621
1881	11	18,945
September 30 up to 1882	10	8,905

It will be observed from this table that the tonnage launched in 1881 is the largest in the history of the Dundee ship-building trade. Another notable fact brought out by this table is that though in 1881 the number of vessels built is scarcely one-half of that in each of the years 1875 and 1876, the total tonnage is much in excess of those years, showing clearly the preference ship-owners now have for a larger class of vessels. As an example of the kind of ships built in Dundee, it may be mentioned that the vessels launched in 1881 were composed of 8 iron steamers, 1 steel steamer, 1 wooden steam whaler, and 1 iron sailing vessel. This year ship-building here has been and is more active than it has been previously known to be, and some of the workmen (leading hands) are making enormous wages—from $20 to $25 per week. The foregoing table only shows 10 vessels of 8,905 tons, launched from January 1 to September 30 of this year.

There are, however, a number of large ships just ready to be put off the stocks, which will bring up this year's total tonnage, it is believed, beyond that of 1881. The fullness of the demand for vessels, and the number of contracts that have been placed, have rendered it necessary for builders to concede to their workmen very much in the matter of wages. Meantime the immense activity in ship-building is stimulating other trades in this town. The following table shows the—

Average wages paid to artizans engaged in ship-building in Dundee, on September 30, 1882.

Branches.	Per week.	
	Hours of labor.	Average wages in United States money.
Ship iron riveter.....piece-work..	54	$13 50
Ship holders on.....do....	54	11 50
Ship iron workers (laborers)	54	5 50
Ship carpenters (wood)	54	7 50
Ship wrights	54	7 50
Ship carvers	54	12 00
Ship smiths	54	7 75
Ship foremen, or overseers over these workmen	54	12 00
Ship draughtsmen	54	10 50

SEAL AND WHALE FISHING.

The seal fishing at Labrador this year has been very successful, but in Greenland only a moderate catch has been got. Indeed with some of the vessels it has been a complete failure—the fishing—this year in Greenland. The weather there was intensely cold and stormy, and the vessels got beset amongst immense quantities of ice, and in consequence a valuable Dundee steam whaler was lost. One of these vessels at Labrador got severely damaged by constant collision with fearful heavy ice that everywhere surrounded her. This industry, taking one year with another, yields a fair profit to the different companies here owning these vessels There are from 12 to 15 wooden steamers engaged in the trade, and they gain on an average about £108,000 annually. From this sum the heavy expenses of the fleet falls to be deducted. Only a portion of the men needed to work these fishings leave with the vessels from Dundee. More hands are obtained in Shetland for Greenland, and in St. John's, Newfoundland, for the Labrador fishing. The men are paid at the rate of about $10 per month, comfortably fed, and get a fixed allowance on each ton of oil secured.

The reports from the Greenland whale fishing this year are not very encouraging, but better than they were last year at this time.

HERRING AND OTHER FISHINGS.

The returns from the herring fishing stations in this consular district compare favorably with those of last year, while the quality of fish landed has shown a marked improvement, there being 22 per cent. more of full fish caught. A noticeable feature in the character of the weather during the season has been frequent coldness, and but for that in all probability this fishing would have been better than it is. An unusually large quantity of the herrings were consumed in English fresh markets this year, leaving less to be cured. Good prices were obtained for the fresh home consumption, and also for those cured and exported to Germany and Russia. To give an idea of the extent of fishing in Scotland I have to state that there are nearly 15,000 boats and 50,000 fishermen. Comparatively little damage has been done to boats and gear this year, and altogether the herring fishing of 1882 may be set down as a fortunate one in many respects. The cod, ling, and haddock fishings have also been profitable.

The catch of salmon in the Tay this year has barely been an average. The rentals payable for the privilege of fishing this river are falling in value. These rentals amount to £22,000 annually—the largest of any river in Scotland—and the average yearly yield of salmon, grilse, and trout is estimated at from £80,000 to £105,000. Nearly all these fish are sent to London for sale, Tay salmon being there famous for flavor. A feature in the salmon fishing this year is the fact that the average weight of the fish caught has been considerably less than in previous years, very few being got over 40 pounds. This is stated to be due to disease, which has existed for more than a year amongst salmon, and which has killed many of the old fish, so that a larger percentage of the fish netted this season were young.

THE IRON INDUSTRIES.

Engineering and iron-working trades have, during the past year, been very busy. In the marine-engine department there has been much activity, the engines required, being larger than usual for vessels to suit the increased tonnage of steamers launched and building.

The plethora of work for iron-mechanics has enabled them to get

up their wages about 50 cents per week lately. The following table is a statement showing the hours of labor worked by and the average wages paid per week to the workmen engaged in the engine and machine making trades in Dundee, in 1882, as at September 30:

Branches.	Per week.	
	Hours of labor.	Average wages in United States gold.
Pattern makers	54	$8 00
Molders	54	8 00
Engine fitters and finishers	54	7 00
Machine fitters and finishers	54	6 25
Iron turners	54	6 75
Blacksmiths	54	7 50
Boiler makers	54	8 50
Laborers	54	5 00
Foremen or overseers over these tradesmen	54	9 00

HOUSE-BUILDING TRADES.

House-building trades in Dundee have not been stirring during the past year. Only a very moderate amount of building has been going on because house accommodation is plentiful and on account of the general depression of the jute trade. When the staple industry of this town is dull it has a damping influence on all trades, but the building branches suffer most severely. It was hoped that many of the sites vacant in new streets would be built upon this year. The ground, however, is considered too expensive and builders will not speculate. Accordingly there is a large lot of land in the middle of Dundee for which heavy prices were paid by the municipal council lying unoccupied and yielding no revenue. The effect of this has been to increase largely the debt of this town and to raise the local taxation rate. The following is statement showing the hours of labor worked by, and the wages paid per hour and week to the workmen employed in the building trades in Dundee, Scotland, as at September 30, 1882.

Branches.	Wages per hour.	Per week.	
		Hours of labor.	Wages in United States money.
	Pence.		
Bell-hangers	6½	51	$6 90
Bricklayers	7½	51	8 00
Laborers	5	51	5 31
Builders of stone	6½	51	6 90
Laborers	4½	51	4 75
Hewers, or stone-cutters	6½	51	6 90
Laborers	4½	51	4 75
Carpenters, house, or joiners	6	51	6 37
Gas-fitters and plumbers	7	51	7 50
Glaziers	6	51	6 37
Lath-splitters	6½	51	6 90
Painters	6½	51	6 90
Plasterers	6½	51	6 90
Slaters	6½	51	6 90
Stone carvers	10	51	10 5 0
Foremen or overseers over these workmen	8½	51	9 00

BOOT AND SHOE MAKING.

Boot and shoe making by steam machinery in Dundee is one of the most flourishing trades carried on in this town. The boot factories here employ a large number of men, women, boys, and girls, who make good wages, as they are generally paid by the piece. Much of the machinery used in these works was invented and constructed in the United States.

CONFECTIONS.

Marmalade, fruit-preserves, and confectionery-making in Dundee is a large and thriving industry, giving employment to many hundred people, especially women, who work 56 hours per week and make fair wages. The most of the fruit used in these works is imported direct from the Continent—Spain and Italy.

WILLARD B. WELLS,
Consul.

UNITED STATES CONSULATE,
Dundee, October 10, 1882.

TRADE AND INDUSTRIES OF ST. HYACINTHE.

REPORT BY COMMERCIAL AGENT WORDEN.

A commercial report from this consulate must of necessity contain but little of value in the matter of trade statistics.

The commercial relations existing between Canada and the United States are of so intimate a nature that our merchants are nearly if not quite as familiar with the wants and demands of Canada as a consular officer can be; and as a consequence one can go nowhere through a town and not see displayed and advertised American manufactures and inventions. Indeed, merchants have not hesitated to say that our prints, oil-cloths, cottons, agricultural implements, together with many other articles are superior to and find more ready sale than like articles, the manufacture of foreign countries.

I have had occasion to note certain goods that are used or needed here, and am of the impression that our merchants and manufacturers, by sending active agents to this portion of Quebec would, with little difficulty, open a comparatively large trade.

A considerable quantity of light wine is used by the French families, such as Sauterne, and claret, continual importations of which are made from France. I am of opinion that our American clarets and Catawbas could be introduced.

Mowing and reaping machines are not generally used by the farmers, and in these alone there is an extended field. I have not seen, and I am told by credible persons that there are but two reaping-machines in use in the neighborhood of St. Hyacinthe, and but twenty in the country, and such a thing as an automatic binder is unknown.

During the past harvest grain was cut upon a farm of the Roman Catholic college with a cradle, and in many parts of the country the scythe or sickle is still an ordinary implement of husbandry.

The soil through this country is exceedingly productive, but is not plowed to a greater depth than 4 to 6 inches. The ground is not drained, nor is it summer-fallowed, and consequently is cold and sour, as is as-

serted when I have made inquiries or commented upon the little depth to which the plow is put.

It has seemed to me that American fertilizers and guanos, once introduced, would find a market.

The French Canadians are slow to adopt new ideas. The spinning-wheel is an article of standard manufacture, and the loom is not unfrequently a part of the domestic economy. The following, from the work of a celebrated novelist of the day, is a fair description of French Canadians: It appears they bear the best character in the world, being religious, sober, industrious, and honest, and are devoted parents to their numerous offspring. The writer went among them, and, after having with great difficulty succeeded in understanding their language, found their dialect to be that of a district in Normandy, as spoken in the seventeenth century. Their contentment is due to profound ignorance, and their want of enterprise to their contentment.

The reapers in use here are manufactured by a Toronto firm, and are, I believe, of an American pattern. There is also a phosphate or guano made in Ontario that is slowly finding a market in this part of Canada.

St. Hyacinthe sustains a number of flourishing manufactories, and employs a considerable population of skilled labor.

Probably the most important industry is about to be opened by an American firm, who have during the summer erected a large building for the manufacture of "hosiery." The intention is to employ about three hundred men, boys, and girls.

Another flourishing industry is a boot and shoe manufactory. The firm has perfected and patented a machine for forming and hardening the counters of shoes, and is about to establish an agency for the manufacture of this article in France.

The St. Hyacinthe Manufacturing Company is the wealthiest corporation of the place, and owns the entire water-power. The principal production is flannel goods. The wool used is Cape, and is bought in Montreal and New York.

The customs returns at this port show imports from the United States, 1881–'82, $169,734; from other countries, 1881–'82, $13,656; total, $183,390.

Notice of application to the legislature of Quebec at its ensuing session is given in St. Hyacinthe for a charter to "construct a railway from St. Athanase or Versailles, in the county of Iberville, or from any other point in said county." The said railroad to pass through the city and county of St. Hyacinthe among other places, "and reach at any point the Richelieu River or the St. Lawrence, with the right and power to build branches, bridges, and telegraph lines as may be judged necessary by said company for the working of its railway."

WARREN A. WORDEN,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
St. Hyacinthe, Canada, October 18, 1882.

WOOLEN MANUFACTURES IN NEW ZEALAND.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The value of the various kinds of woolen manufactures imported into the colony of New Zealand during the year 1881 was $485,310, against

$520,885 for the year 1880. The duty charged on the imports of woolens is 15 per cent. ad valorem. This duty is intended to protect the products of the different woolen factories of the colony. It has been the opinion of the leading public men of New Zealand for many years past that certain grades of woolen goods can be manufactured in the colony much cheaper than they can be imported from Europe and America. The average annual value of the raw-wool product of the colony is between $15,000,000 and $18,000,000, and there is strong reason to believe that the value of the product will be still further increased in the near future. This fact, together with the almost boundless supply of cheap coal for steaming purposes, has led the people to deem it wrong to send their wool abroad to be manufactured, and thus incur the extra charges in the way of freight, insurance, duty, and the intermediate profits of the manufacturers and commission merchants, when the raw product could be just as well manufactured at home. The truth is, the industry of sheep-farming in New Zealand is becoming every year more and more profitable. Acccording to a return laid before both houses of general assembly of the colony for the year 1881, it is shown that in Auckland sheep district, embracing an area of 14,000,000 acres, there were on May 21, 1881, 421,451 sheep; in Napier district, with barely 4,000,000 acres, the number of sheep was 2,041,857; Wellington, with 6,500,000 acres, had 1,407,180 sheep; Canterbury, with 8,300,000 acres, had 3,473,843 sheep; and Otago, with an area of over 14,000,000 acres, had 3,586,896 sheep. In the Auckland district the number of sheep has diminished since 1879 by 41,267; in Marlborough a decrease of 33,000 took place during the same period; Wellington shows an increase of about 60,000, while in Canterbury and Otago a slight increase is perceptible. The Napier district, however, occupies a most conspicuous place for increase in sheep-farming, there being in 1881 no fewer than 354,795 more sheep in that district than there were three years previously. From this it will be observed that not only has the Napier district by far the greatest number of sheep in proportion to area, but that it has also made the greatest advance in the numbers of sheep during the past three years. It does not appear that the presence or absence of infection has had anything to do with the increase or decrease of sheep-farming in particular localities; so it must be concluded that the fluctuations are produced by other and probably more direct causes, such as the suitability of the districts for grazing. It is, of course, to be noticed that in Napier district, where the largest increase took place, there has been no infection among the sheep during the last three years; but the immunity from disease was experienced in Otago and Canterbury during the period named without any great increase taking place. Then, in Wellington, where about 40 per cent. of the whole suffered from disease at one time, the flocks have greatly increased instead of diminishing, and in Marlborough district, where 90 per cent. of the sheep were infected, a very slight decrease has taken place, in comparison with the diminution in the Auckland district, where the infected sheep were only about 10 per cent. of the total number. Otago in the South and Napier in the North Islands are shown to be the large centers, not only of sheep-farming, but also of extensive owners of stock. Otago has 3,586,000 sheep, owned by 939 persons, of whom 54 possess flocks of over 20,000 sheep each. Canterbury, with only 100,000 less sheep than Otago, spreads the proprietorship over 1,526 individuals. In Napier the large stock-owners would seem to be more numerous than either of these districts, for with over 2,000,000 sheep there are only 386 owners, of whom 27 have flocks of 20,000 and upwards; 36 have over 10,000 sheep each, and 55 have over

5,000 each. The 421,451 sheep in Auckland district are divided between 1,366 owners; none of these own as many as 20,000, but in Poverty Bay subdivision there are 15 persons who each own over 5,000, and three who have over 10,000 sheep each. Throughout the whole colony it is worthy of remark that the tendency is in the direction of an increase in the number of owners of sheep even in those districts where the flocks show the most considerable diminution. The sheep owners in the colony on 31st May, 1881, numbered 6,857, being an increase of 731 on the number at the same time in 1879. The total number of sheep being a little over 12,000,000, this gives an average of about 1,700 sheep to each individual.

All the woolen mills established in the South Island have been successful to a degree far beyond the expectations of their founders. Already about 5,000 bales of wool are consumed annually by them. The most important of those mills is the Mosgiel woolen works, situated about ten miles from the city of Dunedin. The subscribed capital of this company for the year 1881 was £53,491. I give below a balance sheet for that year, showing in detail the assets and liabilities of the company.

Mosgiel Woolen Factory Company (limited), for the year ended October 6, 1881.

LIABILITIES.

			£. s. d.
Capital, 16,600 shares, at £5		£80,000	
Less uncalled, 16,000 shares, 30s	£24,000		
Less calls not due and unpaid	2,509		
		26,000	
			53,491 0 0
Loans payable, mortgage on property			13,000 0 0
Bills payable			275 1 6
Reserve fund			7,000 0 0
Outstanding accounts and 2½ per cent. discount on book debts			980 5 10
Interest due to shareholders on calls paid in advance			39 2 2
Dividends unpaid			1 8 8
Balance of profit and loss account			6,930 19 3
			81,717 17 5

ASSETS.

	£. s. d.	£. s. d.
Plant at October 6, 1880	36,304 1 6	
Additions during the year	930 12 4	
	37,234 13 10	
Less depreciation written off	2,000 0 0	
		35,234 13 10
New building account to date		1,097 13 7
Warehouse property		4,469 10 0
Office furniture		250 0 0
Bills receivable		2,884 8 1
Book debts		12,745 15 5
Cash in Colonial Bank of New Zealand		3,415 14 8
Cash in hand		3 7 6
Stock (manufactured and in process) and raw material		21,616 14 4
		81,717 17 5

PROFIT AND LOSS ACCOUNT.

DR.

	£.	s.	d.
To fire insurance	630	15	8
To interest and discount	1,561	8	9
To working expenses, factory maintenance, charges and salaries	4,045	1	8
To depreciation on plant	2,000	0	0
To bad debts	361	3	3
To interim dividend paid for half-year, April 6, at 10 per cent. per annum.	2,423	15	0
To balance	6,930	19	3
	17,953	3	7

CR.

	£.	s.	d.	£.	s.	d.
By balance at October 6, 1880	9,245	0	7			
Less dividend October 7	£5,332	5				
Less carried to reserve fund	3,000	0				
	8,332	5	0			
				912	15	7
By premium on 2,150 shares, at 5s				537	10	0
By transfer fees				8	0	6
By goods account				16,494	17	6
				17,953	3	7

Much of the machinery used in the Mosgiel works was manufactured in the United States, the most remarkable of which is a machine for clipping the nap of the cloth. It is no longer a disputed fact that it was an American who first invented what is known as the helicoidal shears, a cutting machine with spiral blades on a cylinder acting against a straight steel blade and shearing the nap of the cloth even and perfectly. The automatic Bigelow carpet loom, Simpson's wool comber, and the compounder, which makes from comparatively thin yarns the heavy pile goods known as the Windsor fabrics, are all American inventions.

The blankets and underwear made at the Mosgiel Woolen Works are absolutely unsurpassed in quality and finish. They carried off the first prizes at the International Exhibition at Sydney. The blankets are heavier than those imported from England, and are pure wool, not mixed with cotton or any other material. These blankets find a ready sale at about 87½ cents per pound weight. The blankets imported from England sell from 38 cents to 62½ cents per pound. Some of the English blankets are largely made of shoddy.

Many are under the impression that the manufacture of shoddy blankets is something new in the art of manufacture of woolen fabrics; but such is not the case. As far back as the time of Hugh Latimer this cheat was practiced. Indeed, that sturdy old divine denounced from his pulpit, "The mixing of wares, the stretching of woven pieces to more than their proper length, and the practice of restoring body in cloth by incorporating into it a so-called flock powder." A project for reforming these abuses was sent to Cecil. In 1590 the people of York appointed a committee "to deface, cut into pieces, or burn all such blocks or boards as are used for chopping of flocks."

It is a curious fact that little progress has been made in the art of weaving. Of course the introduction of machinery has done much to quicken and facilitate the process, but it may well be questioned whether any actual improvement has been made in the fabrics themselves. It is well known that the natives of India, as far back as the time of the Macedonian conquest made shawls of unsurpassed beauty, and that both the Greeks and Egyptians were versed in many branches of woolen

manufacture. The flax mats and other garments woven by the Maoris (the aboriginal inhabitants of New Zealand, are far more beautiful and durable than anything of the kind that has ever been produced by the most improved machinery in modern times.

The Mosgiel Woolen Company has recently enlarged and rebuilt its works at a very heavy cost. The carding and spinning room is 200 feet in length and 120 feet in width; the walls are built of hollow brick 14 inches in thickness, and the floor, which is 8 inches thick, is made of concrete to a depth of 6 inches, and above that is 2 inches of solid cement. The beams that support the roof are of the best Oregon timber, some of them being 81 feet in length. There are many other improvements in the course of construction, and the entire building is so arranged that the factory can be still further enlarged upon the same principle. The demand for the cloth of the Mosgiel mills is so great that the company cannot begin to supply it, although the machinery is kept going both day and night.

The uniforms of the police and the armed constabulary of the colony are made of cloth manufactured at these works.

THE ROSLYN WOOLEN MILLS.

About $350,000 have been expended on these works. The site of the factory was purchased in June, 1878, and the machinery arrived in Dunedin in 1879. The building was ready for it and it was at once put in order. The building is 216 feet in length and 148 feet in width. The machinery is driven by a fine horizontal tandem engine of 60 horse-power. Two boilers; one of Galloway iron and the other of Siemens-Martin steel, supply steam to the engine and also, through pipes, to different parts of the factory for boiling water and other purposes. Over the boilers is a room for drying yarn, thus utilizing the heat which would otherwise be wasted. Instead of the ordinary belting the main shaft is driven by the new patent rope-belting, the advantage of which is that should two or even three strands give way the works are not brought to a standstill.

The electric light is used in the building, showing that the people of this distant land know how to keep pace with the times. There are nine electric lamps in the main building, one in the finishing room, and it is proposed to light the smaller rooms with Swan's incandescent lamps. The lamps used are what is called the Joel, and the electric power is supplied by one of Siemens D. 2 dynamo machines, which is driven from the main shaft of the engine. It is said for the supply of ten large lamps five horse-power is required, and although the machine is driven at the rate of 820 revolutions per minute, it is so constructed that the wear and tear is inappreciable.

I have been unable to procure a balance-sheet showing the assets and liabilities of the Roslyn Woolen Company, and also of the celebrated Kaipoi Woolen Works, near Christchurch, but I am informed that both of these factories are based upon the most solid business principles and pay handsome dividends to the stockholders.

THE IMPORTS OF WOOLENS.

I give below a table showing the value of all the various kinds of woolen goods imported into New Zealand for each year from 1871 to 1881, inclusive:

Table showing the value of woolen goods imported into New Zealand from 1871 *to* 1881, *inclusive.*

	Value.
1871	$279,145
1872	493,530
1873	553,700
1874	643,120
1875	514,895
1876	588,410
1877	569,085
1878	696,308
1879	585,035
1880	520,885
1881	485,310

The customs returns do not classify the various kinds of woolen goods imported into the colony, but tweeds and coatings and blankets form the most valuable part of the imports. About $80,000 worth of blankets are imported annually.

Scotch tweeds sell in New Zealand from 75 cents to $1.25 per yard. The prices of coatings, cloths, and flannels vary greatly, and are fluctuating. There is a steady demand throughout the colony for Scotch, Yorkshire, and West of England tweeds.

Crossley's carpets (tapestry), best quality, sell readily for 87½ cents per yard, and good Brussels brings from $1 to $1.25 per yard. Axminster carpeting varies from $1 to $2 per yard, according to quality. Crimean-colored shirts, of which large quantities are brought to New Zealand, sell from $7.50 to $22 per dozen. Woolen undershirts, woven Leicester, sell from $10 to $16 per dozen, and woolen drawers bring about the same prices. All the various styles of woolen goods used in Great Britain and the United States become popular here.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, New Zealand.

CHURCH AND STATE IN MEXICO.

REPORT BY CONSUL-GENERAL STROTHER.

To the thoughtful and unprejudiced student of Mexican history it is sufficiently evident that the conquest achieved by the sword and policy of Cortez must of itself have been but superficial and in the nature of things transitory, had it not been supplemented, perfected, and confirmed by the missionaries of the Spanish Catholic Church; and it is mainly due to the labors of these missionaries that a new faith and a new civilization were implanted on the soil of the New World, and the various tribes or nations which occupied this portion of the American Continent eventually subjugated and consolidated into the magnificent viceroyalty of New Spain.

After three centuries of oppression and spoliation, sometimes modified and ameliorated, at others shared and encouraged by the representatives of the Church, the Mexican people rose against their conquerors, and, after a persistent and sanguinary struggle of eleven years' duration, threw off the civil and military yoke of Spain and achieved their national independence. In dissolving the political relations which had hitherto bound her to the mother country, Mexico found herself independent indeed, but not free.

The influence of the old Spanish church had become so profoundly rooted in the customs and affections of the people that it seems to have survived this long period of political and social convulsion but little impaired, and the first device adopted by Independent Mexico was that of the three guarantees, "Religion, union, and liberty."

But it soon became apparent that the aspirations of a free people for a liberal and progressive government, and the interests of a church nurtured in absolutism, were incompatible, and that there could be no peace until one or the other of these antagonistic principles had obtained undisputed mastery.

Although, in the long and wasting contest which followed, the fanaticism of religion and the fanaticism of liberty seem to have vied with each other in outraging humanity, and amidst personal interests, selfish ambitions, and political brigandage, all guiding principles seem to have been ignored or forgotten, yet it appears that there has always existed in the country a sufficient reserve of intelligent and disinterested patriotism to direct events toward that political ideal to which all modern society seems to be irresistibly tending. After fifty years of almost continuous wars and revolutions, the party of liberal opinions has at length definitely triumphed.

The results of this triumph have been the complete separation of church and state, and the absolute subjection of the ecclesiastical to the civil authority; a political constitution based on the broadest republican principles; a free press, free schools, and universal religious toleration.

Indeed, the laws of the reform, proclaimed in 1857 under Comonfort and executed by Benito Juarez in 1867, after the downfall of the empire. are more thorough and radical in their character than those promulgated by any government of modern times.

The church formerly owned all the best property in the republic, city and country, consisting, according to the statement of a clerical writer, of eight hundred and sixty-one rural estates, valued at $71,373,000, and 22,649 lots of city property, valued at $113,241,530, making a total of $184,614,800. Other statements, more general in their character and apparently less accurate give an aggregate of $300,000,000 as representing the former wealth of the church. It is not improbable that even this latter estimate falls short of the truth, for the Mexican ecclesiastical body well understood the value of money as an element of power, and, as bankers and money-lenders, possessed vast assets which could not be publicly known or estimated.

By the "laws of the reform" the whole of this property was confiscated (naturalized) for the use of the state. Even the cathedrals and churches in which Catholic worship is now permitted are the absolute property of the government, liable at any time to be denounced, sold, or converted to public uses, the officiating clergy being only tenants by courtesy.

All religious societies, from the Jesuits to the Sisters of Charity, who taught in the schools and served as nurses in the hospitals, were suppressed, and their "personnel" sent out of the country.

Religious parades, processions, or demonstrations of any kind were strictly prohibited in the streets or anywhere outside of the churches.

Any priest or attendant appearing in the streets in a clerical dress is subject to fine and imprisonment. Even the ringing of the church bells is regulated by law.

Those rites which the Catholic Church has always classed among her holy sacraments and exclusive privileges, the possession of which has

constituted the right arm of the power over society in Mexico, are all regulated by the civil law. The civil authority registers births, performs the marriage ceremony, and provides for the burial of the dead. While the church marriage ceremonies are not prohibited to those who desire them, they are legally superfluous, and alone have no validity whatever.

The fact that any government should have been bold enough to proclaim and strong enough to execute such laws against a religious system apparently so powerful and so profoundly radicated in the hearts and customs of its people, is so surprising that it would seem to require explanation. This may be found perhaps in the character of the Indian race, whose native spirit of independence predominates over all other sentiments.

It is further suggested that the aboriginals of this country never were completely christianized, but awed by force or dazzled by showy ceremonials they accepted the external forms of the new faith as a sort of compromise with their conquerors. I have myself recently attended religious festivals where the Indians assisted, clothed and armed as in the days of Montezuma, with a curious intermingling of Christian and Pagan emblems, and ceremonies closely resembling some of the sacred dances of the North American tribes.

I have been credibly informed, moreover, that even to this day, on the anniversaries of the ancient Pagan festivals, votive garlands are sometimes found hanging upon the hideous stone idols now exhibited in the court-yard of the National Museum, and that the natives of the mountain villages not unfrequently steal away to lonely forests or hidden caves to worship in secret the gods of their barbaric but independent ancestors.

Then, in the natural course of things, the current ideas of the century have been disseminated, and have taken root among the more enlightened classes, and the history of no country contains a longer or more glorious catalogue of martyrs to liberal principles than that of Mexico, nor can any country boast of more patriotic, able, and sagacious living statesmen, so that when the fruit was ripe there was a hand ready to gather it.

Benito Juarez, an Indian of pure blood, executed the laws of reform with the comprehensiveness of a statesman, and a vindictiveness engendered by fifty years of bitter civil strife and three centuries of oppression. His action was fully sustained by the nation.

Shorn of her wealth, curtailed in her offices, stained with the tragic memory of the fallen empire, the Old Church will probably never again appear, either in arms or council, as a contestant for political power, but she still exercises a wide-spread and deeply-rooted influence over Mexican society. With all her losses she has doubtless gained much in moral dignity, and the stories formerly current in regard to the licentiousness of the Mexican clergy have no applicability to-day; at least in the capital and principal centers of civilization there is no class of men more respectable and exemplary. Neither is the Mexican church without the means of continuing her struggle against liberalism on her more appropriate field of social education and morality. According to recent statistics there are now in Mexico 3,874 Catholic temples open to worshipers. Old churches are being repaired and refitted, and new ones are in course of construction. The ecclesiastical coffers are kept well filled by the voluntary contributions of the devout, and where the government establishes a free school the church opens two, and where a Protestant chapel is consecrated a new Catholic temple is founded.

In the smaller towns and remoter conservative districts continual efforts are made to evade or nullify the minor provisions of the reform laws, and the prohibited religious parades and processions will from time to time ostentatiously emerge from their legal seclusion, or the indignant zeal of some State bishop fulminate a bull of excommunication against such of his flock as will persist in dealing or consorting with Protestants and sectaries.

These breaches of law are loudly denounced by the liberal press, and several months ago the President of the Republic was moved by the outcry to issue a proclamation on the subject, a translation of which is herewith appended.

About the same time a zealous lady who matronized a religious procession in a village near the capital was fined and imprisoned for the offense.

While the liberal press seems so nervously sensitive to every movement of its once formidable enemy, the government is cultivating and encouraging every element that may serve to strengthen society against the possibility of a conservative reaction. Not long since a Protestant clergyman applied to the governor of an important State for a guard to protect his church against a threatened mob. The reply of the governor clearly and curtly expresses the prevailing sentiment of the liberal party on the question involved:

SIR: I willingly give you the desired protection, as it is my duty to see that the laws are respected; and while I feel no interest whatever in your religious forms or opinions, we are all interested in encouraging the organization of a body of clergy strong enough to keep the old church in check.

Thus, while we may feel satisfied that open war between the ecclesiastical and civil powers is definitely ended, the conquered party is still considered sufficiently formidable to keep the victor jealously alert.

The respective attitudes of the antagonists may be aptly illustrated by a glance at the grand plaza of the city, across an angle of which the palace of the liberal government and the old cathedral stand looking askance at each other; on the one hand, at the guard mounting, the serried lines of bayonets and the rolling drums appear as a daily reiterated menace and warning; on the other, we might naturally expect to hear from the cathedral towers a responsive peal of indignant protest and sullen defiance, yet we remember that it is not the clergy, but the government, which holds the bell ropes. And this brings us to the consideration of the only point in the question which yet remains unsolved, and which may be regarded as of paramount importance to the future peace and prosperity of the republic.

What are the probabilities that the Catholic Church of Mexico within a reasonable period will learn to accommodate itself to the new order of things, and be content to live peaceably side by side with civil liberty and religious toleration? To this question a glance at history and the impartial observation of passing events will furnish the most satisfactory and favorable solution.

That indomitable spirit of independence, especially characteristic of the Mexican race, the source of many errors and misfortunes as well as its greatest glory, does not belong exclusively to the party which has proclaimed the republic and denied the church participation in the civil government, but we may fairly suppose that it is shared to a greater or less degree by men of all parties and all shades of opinion.

The three most distinguished among the hero-martyrs of Mexican independence—Hidalgo, Matamoras, and Morelos—were sons and servants of the church.

In the year 1860 a group of Catholic presbyters in the city of Mexico published a declaration of their adhesion to the laws of reform, and protested against the refractory conduct of their ecclesiastical brethren. In 1861, Ramon Lozano, a curé of Santa Barbara de Tamaulipas, with his associates, proclaimed a reform of the church on the basis of universal toleration and obedience to the civil law.

A similar movement was initiated by Francesco Aguilar at the capital in 1864. These germs of reformation seemed to have perished during the wars of the French intervention, but have revived since the fall of Maximilian's empire, and are steadily spreading and prospering. Quite recently several of the leading prelates in different States have published pastoral letters recommending the observance of the civil laws in regard to marriage and other points on which the church party has been most difficult and refractory hitherto.

From these facts we can readily believe what is frequently and confidently asserted by intelligent Mexicans, that there now exists, as there always has existed in the bosom of the ecclesiastical body itself, a number of wise, patriotic, and liberal men who sincerely lament the part the church has taken in former civil contests, and more especially its more recent obstructive and resistance to the established and peaceful popular government of their country; but controlled by the strict discipline of the fanatical majority this element has heretofore been unable to make its influence felt.

They nevertheless predict, as the inevitable result of their liberal system of popular education, accelerated by the recent revival of commerce, their rapid material progress and consequent increase of foreign immigration, that the liberal element of the clerical party will be in a position to dictate such reforms in the church itself as will sufficiently reconcile its pretensions to the essential requirements of civil and religious liberty, and that in a few years we may hope to see these great principles as firmly established and practically accepted in Mexican society as they are now broadly asserted in her constitution and laws.

But those fall into serious error who imagine the possibility of accomplishing any satisfactory religious reform by simply substituting one exclusive system for another. The inevitable tendency of free thought and free discussion is to create an infinite variety of opinions, and as the cords of discipline which have hitherto served to bind the old organization together must, of necessity, be loosened to make room for the intellectual and material growth of the republic, missionaries who have been nurtured amidst free institutions and educated in the broadest Christian charity will find in Mexico a worthy and interesting field of labor.

DAVID H. STROTHER,
Consul-General.

UNITED STATES CONSULATE,
City of Mexico, December 23, 1882.

AFFAIRS IN CAPE COLONY.

REPORT BY CONSUL SILER, OF CAPE TOWN.

The uninterrupted prosperity which this colony had enjoyed for more than ten years began to wane at the beginning of last year, and eventually culminated in a financial crisis more severe than was ever before experienced in the colony.

FINANCIAL CRISIS.

Several causes contributed to this unfortunate crisis, chief of which was a reckless speculation in diamond-mining stocks. Several persons had made magnificent fortunes by this species of traffic at the Kimberly Diamond Fields, and the precedent produced a mania for speculation which permeated all classes and conditions of citizens throughout the colony. Prospecting for diamonds was carried on to an extent which now appears ridiculous; hundreds of new companies suddenly sprang into existence, and no sooner put their scrip on the market than it was taken up, and frequently resold within twenty-four hours afterward at double the face value. This altogether abnormal process of speculation soon degenerated to absolute gambling; and not only was the capitalist eager to stake his all on the prospect of doubling it, but the mechanic and daily laborer invested their meager savings with the same expectation in view. Towards the middle of the year the banks took alarm at what was plainly to be seen a state of affairs which could not last, and refused all further advances of money on diamond-mining scrip. This action of the banks at once brought about the impending crisis, and a fortnight afterwards, stocks, which had been taken at a large premium, could not be disposed of for one shilling in the pound. Then came the day of reckoning; men who thought themselves wealthy suddenly woke up to the realization of their utter bankruptcy; the laboring man saw the earnings of years of toil melt away. Commercial demoralization ensued, and the bankruptcy courts were deluged with business.

In addition to the causes above enumerated, the late business depression may be traceable to—

First. The farmers abandoning the comparatively safe employment of sheep farming for the tempting but more precarious gains of ostrich farming. This has been done to that extent that now a falling off in prices of birds and their feathers is not less than 50 per cent. as compared with prevailing prices two years ago.

Secondly. By a tendency to overtrading, imports of manufactured goods of all descriptions have been annually increasing for several years, in fact, considerably in excess of the demand; trade overdone and profits cut down to the lowest point.

Thirdly. The long-credit system. It has long been the custom here in all commercial transactions to allow six months' credit, or a discount of 5 per cent. on cash payments. There is now a strong pressure being brought to bear by some of the leading business men of the colony to set aside this custom. Should they accomplish their object the result would certainly have a tendency to place trade on a safer footing. I may here add that one of the first men to succumb to the diamond-mining bubble was a citizen of this city, who lost $2,250,000 by speculations in diamond-mining scrip.

Notwithstanding the unpropitious closing of 1881, the earlier part of the present year began to develop indications of returning prosperity to the colony, and it was thought that a few months of patience and mutual forbearance would tide over and counteract recent troubles. This encouraging prospect was blighted in a great measure by the breaking out of small-pox in this city in June, and which rapidly assumed the proportions of an epidemic, and which has scourged Cape Town and the neighboring villages for the last four months. The effects of this epidemic have been disastrous to trade and commerce, particularly at Cape Town. The country people, on whom the Cape Town merchants are largely de-

pendent for trade, shut themselves in their houses and refused all intercourse with the city. Foreign ships avoided Table Bay harbor, and the South African metropolis seemed literally quarantined to the world.

It is now believed, however, that the lowest depth of misfortune has been reached; the epidemic is rapidly abating, and the lesson which it has taught to the authorities here, though a sadly dear one, has aroused them to the necessity of decent sanitary arrangements. The late commercial panic will lead to greater caution and circumspection on the part of those engaged in commercial undertakings; hence out of past evils it is to be hoped that much good may arise.

The season thus far has been generally favorable to growing crops throughout the colony, and especially so as regards the wine industry, the vineyards being prolific this season. However, it is to be hoped that with the disappearance of the small-pox epidemic and a liberal yield of the soil, confidence will be restored, business revived, and that Cape Colony will soon resume its importance as one of the great commercial centers of the southern hemisphere, from which its late misfortune had displaced it.

NEW GRAVING DOCK.

On the 20th of October last there occurred one of the most interesting and important events in the commercial history of this port, namely, the opening of the new graving dock, henceforth to be known as the "Robinson Dock," in honor of the present efficient governor of the colony, Sir Hercules Robinson. It was arranged that the steamship Athenian, 4,500 tons register, one of the Union Steamship Company's boats, should be the first to enter the dock. The Athenian lay at anchor in Table Bay, and at noon the invited guests, consisting of the governor and staff, colonial and municipal officers, the foreign consuls, and the principal merchants, were conveyed to the mammoth craft in a steam tug-boat. Soon afterwards the Athenian, drawing 23 feet of water, steamed into the graving dock without accident or mishap. The ceremony was witnessed by thousands on shore, who expressed their appreciation of the event by deafening cheers, and was concluded by a banquet given by the Union Steamship Company on board the Athenian.

The length of the Robinson Graving Dock is at the coping level 529 feet 6 inches, and at the keel blocks 500 feet; these lengths would be increased by placing the caissons at the top, thus giving at the coping 541 feet 9 inches, and at the keel blocks 512 feet 3 inches. The width of the dock at the coping is 90 feet, and at the bottom altars 38 feet; the width entrance at top being 68 feet, and at bottom 60 feet. The effective horse-power of the engine used is 100, the diameter of the pumps 6 feet, and of the delivery pipes 2 feet. At low water the depth on sill at entrance is 21 feet, and at high water 26 feet. By the pumps the dock can be cleared of water in eight hours. In constructing this work 243,530 cubic yards of material were removed, and of dressed granite 156,319 cubic feet, or 11,179 tons, were used. By competent judges the Robinson Graving Dock is pronounced one of the best of the kind in the southern hemisphere and to compare favorably with any in the world.

MINERALS.

It has now been more than four centuries since the first white man put foot on South African soil, and yet it has only been within the last generation that the varied and exhaustless mineral deposits of the country have been brought to the notice of the commercial world; and strange to

say, the unearthing of these minerals is still in its infancy. The generous yield of gold and precious stones of South Africa is proverbial, but the recent discovery of rich coal, copper, and manganese deposits has attracted the earnest attention of European capitalists, and opens up a prospect of a permanent and highly remunerative industry. Copper mines at O'Kief have been known and worked for several years past, but recently the yield of ore has become so great that not only a large addition to the working force has been made, but steamships instead of sailing vessels are now being chartered to transport the ore, which principally finds market at the smelting works at Swansea, England, and for which about $250 per ton is realized. Coal, lead, and iron deposits have been recently discovered in the Transvaal, and which, if reports are to be accredited, are inexhaustible. The first is being worked, the quality seems good, and finds a ready market in consequence of the scarcity of wood fuel. The two latter only require railway outlet to market to make them great sources of profit to their proprietors and to the country. In short, I see but one drawback why Cape Colony should not become one of the most important dependencies of the British Crown, and that is the singular absence of natural harbors and navigable rivers; the latter deficiency, however, is to some extent remedied by an elaborate system of government railways, which are being constantly pushed forward and extended; and by liberal expenditures of money the principal seaports of South Africa are being improved and made more safe for the traffic of sea-going vessels.

AGRICULTURAL IMPLEMENTS, ETC.

Number of plows in use in Cape Colony	28,416
Number of harrows in use in Cape Colony	10,580
Number of reaping machines in use in Cape Colony	219
Number of thrashing machines in use in Cape Colony	332
Number of grain-cutting machines in use in Cape Colony	24
Number of machines for cutting hay and straw in use in Cape Colony	148
Number of winnowing machines in use in Cape Colony	129
Number of maize cleaners in use in Cape Colony	150
Number of corn mills in use in Cape Colony	1,695
Number of saw mills in use in Cape Colony	31
Number of wool washeries in use in Cape Colony	57
Number of tanneries in Cape Colony	46
Number of distilleries	1,444
Number of plows in use in British Bassutoland	2,770
Number of harrows in use in British Bassutoland	269
Number of plows used in the Transkei	3,967
Number of plows used in the Tendeuland	3,499
Number of plows used in the Gregualand East	2,556

(MEMO.—Owing to the disturbed state of affairs in Bassutoland since the recent war, but little attention has been given to agriculture.)

LAND AND CROPS.

In 1875 the area of holdings was 79,895,468 acres. This land was held partly on quit rent and partly on lease. In that year, since when no returns have been published, the quantity of cultivated land was only 548,826 acres. The vast proportion of the land being utilized as sheep-walks, cattle-runs, and ostrich camps.

Vinestocks, in 1875, were returned as numbering 69,910,215, when 4,485,665 gallons of wine and 1,067,832 gallons of brandy and spirits were manufactured.

Crop products.—Wheat, 1,687,975 bushels; barley, 447,991; rye,

214,260; oats, 937,363; maize and millet, 1,113,007; pease, 60,636; potatoes, 371,533; tobacco, 3,060,241 pounds; dried fruits, 2,672,761 pounds.

Wheat now sells at $2.70 per bushel; barley, $1.70; rye, $1.90; oats, $2.10; maize, $2.30.

Wine.—First quality sells at $100 per leaguer of two hogsheads, while brandy is worth just double that amount.

Importations to the following values occurred in 1881: Barley, $173,065; maize, $375,925; oats, $265,000; wheat, $601,275; fruits, $50,000; spirits, $750,740; wines, $400,000.

RAILWAYS AND TELEGRAPHS.

Railways.—Besides the 1,000 miles of railways now in operation in the colony, the following additional lines have been authorized to be constructed:

I. From Queenstown to Aliwal north via Burghersdorf.

II. Beaufort west to Hopetown, with the view to its ultimate extension to Kimberly.

III. Craddock to Colesberg.

IV. Wynberg to Kaekbay.

V. A point at or near Colesberg on the Craddock extension to a point at or near the one hundred and eightieth mile from Beaufort west, on the Beaufort west extension.

During the session of Parliament this year an act was passed authorizing also the construction of a railway from Grahamstown to Port Alfred and the Kowie.

The line of railway from Wynberg to Kaekbay will be completed in December, 1882. Of the three main systems of railway, viz, Western, Midland, and East London, the former is working at a small profit of 3.7 per cent.; the second works at a loss of 2.34 per cent., while the third pays the small profit of 3.5 per cent.

Telegraphs.—Number of miles of line, 3,260; number of miles of wire, 4,535. Twelve new offices were opened during 1881. The Cape Colonial Telegraph have paid to the Eastern Cable Company for cablegrams, forwarded from the colony during the year ended December 31, 1881, $266,235.

IMPORTS AND EXPORTS.

Imports.—In 1881, $45,146,230; in 1880, $37,803,870; increase in 1881, $7,342,360.

Exports.—In 1880, $21,349,935; in 1881, $20,700,210; decrease in 1881, $649,725.

Customs dues.—In 1880, $5,172,905; in 1881, $6,456,150; increase in 1881, $1,283,240.

Navigation.—Number and tonnage of vessels entered inwards during 1880 and 1881: In 1881, number 2,312; tonnage, 2,540,910. In 1880, number, 2,114; tonnage, 2,256,405; increase in 1881, number, 198; tonnage, 284,505.

WAGES AND RENT.

The average rate of wages of European farm overseers is $25 per month, with board and lodging; farm servants, $15; and laborers, $1 per day, with food. In Cape Town female domestic servants (colored) receive from $6 to $10 per month, with board and lodging and washing. White servants $10 to $15 per month, and everything found except clothing.

European tradesmen earn $3, and colored $1.50 per day. A laborer's cottage may be procured for $10 per month, and town lodgings for a mechanic cost from $15 to $20 per month. In Cape Town mutton is 18 cents and beef 25 cents per pound; flour is 10 cents per pound all over the colony. Groceries are very dear, while clothing can be obtained at moderate prices.

JAS. W. SILER,
Consul.

UNITED STATES CONSULATE,
Capetown, South Africa, November 10, 1882.

CHEMICAL TRADE OF LANCASHIRE.

REPORT BY CONSULAR AGENT HAMMILL, OF ST. HELEN'S.

At this season of the year, when merchants and manufacturers are taking a retrospective and prospective view of the state of business, it may be considered a not inopportune time to report to the Department of State on the present and future prospects of the chemical trade in this district.

The manufacture of chemicals is with glass, the principal manufacture in this town and neighborhood, and it is one in which the people of the United States are largely interested, seeing that they take a very considerable proportion of all the chemicals manufactured in this country. The trade is, and has been for some four or five years, in a most unsatisfactory state, so far as the manufacturer is concerned, and at the present moment it has reached a condition such as to cause great uneasiness to those engaged it.

Prices have gone from bad to worse, and have at length touched a margin that some time ago would have been deemed incredible. No less than six large factories are at present standing idle in this district, the firms who worked them having succumbed to the inevitable fate which attends on selling an article below cost price. The cause for the extreme and long-continued depression appears to be overproduction; not that, taking into consideration the works standing idle here and on the Tyne, the production in this country (by the old Leblanc process, at all events) would seem to be abnormally excessive, but of late years chemicals have begun to be largely manufactured on the continent of Europe, and by the Solway ammonia process at the Burne Springs of Norwich, in Cheshire, soda-ash of greater purity and at less cost is manufactured than is possible by the old Leblanc process carried on in this district. A scheme is on foot to pump the brine at the springs, and by gravitation deliver it in Runcorn, and perhaps Widnes, a distance of about 13 miles.

If this scheme succeeds, manufacturers of soda-ash in Runcorn and Widnes will be able to work the Solway ammonia process on at least equal terms with their competitors at Norwich, except that they will be saddled with their plant for the Leblanc process, which would not be at all adaptable. In the mean time an ingenious discovery has been patented by Messrs. Schaffner & Helbig, of Aussig, in Bohemia, by which the Leblanc process will be materially aided to hold its own, as they have invented a method by which all the sulphur used in the manufacture of chemicals by that process can be recovered from the alkali waste in a useful and profitable form. The process, on an experimental scale, is perfectly successful, and at the present moment two large firms, Messrs.

Chance Bros., of Birmingham, and Chas. Lenaut & Co., of Glasgow, are putting up extensive and expensive plant to carry it on on a manufacturing scale, whilst the rest of the trade are expectantly looking to see the results obtained, not caring themselves to undertake the risk attendant on all new processes which have not yet stood the test of practical working on a large scale. For the immediate future of the trade things look very gloomy, and manufacturers are beginning to fear that the long looked and hoped for reaction is never to come. Each year a better state of things is predicted, and these predictions are worse than not fulfilled, as instead of an improvement in prices a reduction has to be made. Relief must soon come in some shape or other, as makers cannot go on forever selling their manufactures under cost price, as they are now doing, and it must either come through an increased demand or decreased production, the last named at present appearing to be the most probable solution of the difficulty, unless the proposed abatement of the customs duties (should they be carried) give such an impetus to the demand by the cheapening of chemicals to the people of the United States as to obviate the necessity for it. I think there can be no doubt that reducing the customs duties on chemicals would be an unmitigated benefit to the United States, as they are absolutely necessary to various other of her manufactures, and they themselves are never likely to be made to any extent in the States, on account of the great distance from each other of the raw materials used in their manufacture. The following table of manufacturers' prices in the years 1872 and 1882 will serve to exemplify what I have written:

Description.	Highest price per ton, 1872.	Lowest price per ton, 1872.	Highest price per ton, 1882.	Lowest price per ton, 1882.
95 per cent. salt cake	$25 55	.....	$9 24	$7 78
Soda-ash	60 82	$43 79	34 06	30 00
70 per cent. caustic	126 52	97 33	49 88	43 79
60 per cent. caustic	107 06	82 73	42 58	38 93
Bleaching powder	97 33	82 73	20 68	18 24
Soda crystals	36 49	27 98	17 02	15 82

The price of fuel in 1872 was much higher than this year, but this will not account for the great reduction.

JOHN HAMMILL,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
St. Helen's, Lancashire, December 19, 1882.

MINES AND MINERALS OF SERVIA.

REPORT BY MINISTER SCHUYLER.

The mineral wealth of Servia, although comparatively little known and not yet thoroughly investigated, is very rich. There are known to exist gold, silver, lead, zinc, copper, antimony, iron (hematite, magnetic iron, chrome iron), and manganese, coal, graphite, petroleum, lithographic stone, glass sand, marbles of various kinds, and cement rock.

No geological survey of Servia having ever been made, the mines are known only by outcroppings. These in may cases have been carefully covered up by the peasants in order to prevent their being seized by the government.

Under the old Turkish rule the policy of the officials with reference to mines was such as to prohibit all development of mineral resources, and the older school of peasants, born under or educated in the traditions of Turkish rule, ascribe involuntarily to the present government a similar system, and have for it a similar distrust.

In addition to this, until new treaties were made after the independence of the country in 1878, it was impossible for foreigners to hold real estate outside of certain towns, and even leases were surrounded with such vexatious conditions that it was difficult for foreigners to invest their money in mining enterprises. Native Servians were without the capital, energy, technical knowledge, and habits of combination requisite to enable them to work successfully.

The Romans in old times worked the Servian lead mines and left large quantities of scoria which contained the entire amount of silver in the ore.

The excavations in Belgrade for the foundations of houses constantly bring to light quantities of lead piping of Roman manufacture, some of large size and in good preservation, which in all probability were made of native lead.

Some of these are preserved in the museum at Belgrade, as also a lead box of Roman manufacture containing more than half a cubic yard. The Venetians also worked the lead ores in Servia, and extracted all the silver that they could obtain with their appliances. They continued to work the silver-lead mines down to the fourteenth century, when the arrival of the Turks broke up all industrial enterprises.

In recent years the only mines worked have been the following:

1. Several lignite beds of great extent are worked to furnish fuel for steam breweries and flour-mills. Each mill or brewery has its own mine and extracts only enough to feed its own furnaces.

2. The coal mine of Sikole is worked sufficiently to supply the steam flour-mill of Negotin, ten miles off, belonging to the proprietors of the mine.

3. The mines of Krupan, in the west of Servia, contain lead with a rich percentage of silver, antimony, zinc, and iron, and an attempt has been made to work them by the government.

The Servian Chamber appropriated $200,000 for working these mines, but this amount was all expended in buildings, smelting works, and other preparatory constructions, many of which were unnecessary at that period of the enterprise.

The government was obliged to apply for another appropriation to put the mines into operation, but the Chamber refused to vote it on the ground that it would be "wasted like the other."

The minister of war used a part of his funds to work the mines, enough to obtain lead for making cartridges, but the expense of setting such expensive plant in operation for so small a production was very great.

4. The silver-lead mine at Kutchaina was granted some years ago to a German named Hofman, and was sold by him to an English company, headed by Sir Charles Bright, and expensive plants of all kinds were put there. But, although the ore was rich, the mine consisted only of a series of pockets; the manager did not possess sufficient geological knowledge to trace them, and no adequate return for the investment was ever received.

5. A company of Englishmen are now working the copper mine at Maiden Pek in order to test on a commercial scale Hollway's invention for working poor ores of copper unworkable by present processes.

The present Servian mining laws are liberal. No special legislation is required for any mining operations. A royalty is paid to the government varying from 1 to 5 per cent. on the market value of the metals sold coming from the mine, and after five years' regular working of any mine it becomes the property of the person or company working it. Miners are exempted from military service.

Since the country has been thrown open to the world in consequence of the railway construction and the more liberal policy of the present government, the best mining lands in Servia have been taken up and companies are now being formed to work them.

The following are the most important minerals:

Gold.—Gold quartz is found in the Timok Valley, where the peasants wash the sands brought down by the mountain torrents emptying into the Timok River. As this is done only after heavy rains or the melting of the snows have brought down a fresh supply of sand, it is evident that the gangue rock is soft and not difficult to be worked, being affected by rain and frost.

Zinc.—This has never been worked, but the ore is plentiful in several localities.

Copper.—Copper ore is very abundant and found in many localities. It generally contains a small percentage of gold, and the ancient bronze instruments made in this region also contain gold.

Antimony.—This mineral has also never been worked. Some specimens sent to Trieste for assay were pronounced to be worth about $5.50 per 100 pounds.

Iron.—The Servian iron ores are generally associated with copper to such an extent as to be worthless for malleable iron, as the copper makes the wrought iron so "red short" as to be unworkable in the forge. There are, however, excellent deposits of hematite and magnetic iron which are free from copper.

Manganese.—A large vein of this mineral has been discovered near Kladova, overhanging the Danube in a cliff, and has been traced inland several miles. It is of a very pure quality.

Coal.—Coal exists in large quantities and in many localities. Some deposits are of good quality, others are only lignite. Near Alexinatz a petroleum shale has been discovered on the surface, and, after being examined by experts in London, has been pronounced very valuable for paraffine and rough lubricating material. It is probable that borings in this region would bring up liquid oil.

Graphite, lithographic stone, cement rock, and feldspathic sand have been discovered in workable quantities, and have been pronounced by experts in Vienna to be of good quality.

Lead.—Deposits of lead, both sulphuret and carbonate of lead, frequently associated with silver, are found in many parts of the country. In the immediate vicinity of Belgrade are the deposits of scoria from the shafts formerly worked by the Romans. The richest mines known are those at Krupan, giving an ore which produces from 30 to 90 per cent. of metallic lead, and according to assays made at this mine yielded from 48 to 64 ounces of silver. These mines at Krupan were also worked by the Romans, and vestiges exist of the old mining town of Saser, inhabited by the Saxons who worked for the Venetians and Ragusans.

Salt.—For salt, Servia is still dependent on foreign countries, chiefly Austria and Roumania. To stimulate explorers the government has

long made a standing offer of a prize of $80,000 to the discoverer of a workable salt mine. It is believed that salt has now been found, but it is not yet known whether it is in a workable quantity.

The above information has been derived in part from official reports, but it is chiefly derived from the notes of Mr. Edward Maxwell Grant, a civil engineer from Macon, Ga., who has spent several years in these regions, has traveled through the interior of Servia, and is engaged in industrial enterprises here.

EUGENE SCHUYLER,
Minister.

LEGATION OF THE UNITED STATES,
Belgrade, November 18, 1882.

MADEIRA EMBROIDERY.

REPORT BY CONSUL DU PONT-SYLE, OF FUNCHAL.

Embroidery upon cambric or linen forms a considerable branch of industry for the women of the island of Madeira. The articles produced are nearly all made for the export trade. Among the principal are—

FESTOONS AND ENTREDEUX,

used for trimming ladies' and children's dresses, aprons, &c. The color of the cotton thread used is light blue, as this is least injurious to the eyes of the embroiderers and gives a good appearance to the finished work. After the first washing, the blue of the thread turns to white. The variety of patterns employed is very great, as every exporter wishes to bring new designs into the market.

The cleverness of the embroidery girls is remarkable. At ten years of age they show a quickness and dexterity which enables them to be of much assistance to their poverty-stricken parents. Not less remarkable is it that pieces of embroidery twelve yards in length are delivered in a clean condition to the merchant, considering the visible lack of cleanliness in the homes of the embroiderers.

There exist no manufactories, because the embroiderers work only at home, where often the whole female portion of the family is employed in this work. The employer supplies the materials, linen or cambric, blue cotton, and patterns. These patterns, it is to be remarked, are not stenciled on the stuff itself, but on a piece of paper measuring about a yard and a half, which is placed under the cambric and shows through it. The length of the patterns having been worked, the same design is used for the next yard and a half, and so on until the desired limit is reached. The number of women and girls employed in this industry is estimated at nearly 10,000.

Among other articles made from embroidery are morning gowns for ladies, dresses and aprons for children, altar cloths, &c., which go chiefly to Portugal and Brazil. Fancy handkerchiefs are held in high estimation, the finest costing from $15 to $30. Prices for all embroidered articles are low, and especially for festoons and entredeux, since these articles are to be had, machine-made, from Switzerland (perhaps less durable).

Export duty is 1½ per cent., and goes to the municipality of Funchal.

The value of embroidery exported during the year 1881 was $3,355.34, none of which went to the United States, while 75 per cent. went to

NAGI

Great Britain. During the present year there have been some small shipments to Chicago, and a German merchant here is trying, with indifferent success, to introduce it in New York. Madeira embroidery can hardly be made so cheaply as the machine-made article, but possesses the advantages of superior finish and durability.

L. DU PONT-SYLE,
Consul.

UNITED STATES CONSULATE,
Funchal, Madeira, October 8, 1882.

HOP CROP OF GERMANY.

REPORT BY CONSUL HORSTMANN, OF NUREMBERG.

I have the honor to transmit herewith a general report on the state of the hop crop in Germany for the present season.

The continuous rainy and cold weather during the past summer not only retarded the development of the plant, thus diminishing the quantity of the crop, it also, as a matter of course, greatly affected its quality; but the most serious damage was done to the stock while drying in the barns and in the lofts, attributable also to the constant dampness of the air.

With few exceptions this year's growth is far inferior to that of late years.

The total hop yield of Germany (being denoted as scarcely a middling crop) is estimated at 350,000 cwt. German (38,500,000 pounds English). As the German breweries consume from about 310,000 to 320,000 cwts. (34,100,000 to 35,200,000 pounds), there will be a surplus of from 30,000 to 40,000 cwts. (3,300,000 to 4,400,000 pounds) left for exportation.

Bavaria, the most important hop-growing country of Germany, has harvested only a small half crop, the same being estimated at 17,600,000 pounds. The amount of hops generally used for brewing in this state is about 11,000,000 pounds.

The "Spalter land," the principal district of Bavaria, has raised but little over one-third of a full crop. The color of the product is mostly dark; the quality on the whole is pronounced as being good.

Next in regard to size comes the Hallertau district; it has harvested this year a scanty half crop; its product is looked upon as being the best in Bavaria this year.

The finest hops of this district grow in the neighborhood of the villages Woluzach, Au, and Mainburg. A product much favored by Bavarian brewers is that of the district called Kinding. This year, however, it is inferior in quality and in color, and the quantity raised is scarcely one-third of a full crop.

The so-called Mountain district, comprising the country around the towns of Hersbruck and Lauf, has raised a one-third crop of relatively good quality.

The Aisch Valley is supposed to have a half crop.

The county of Suavia has scarcely a half crop.

The Bavarian Rhine Palatinate is expected to have harvested but little over one half of a full crop.

The amount of hops raised in Würtemberg this year is estimated at 5,500,000 pounds, being a half harvest; the quality varies in the different districts greatly.

Baden has harvested 2,200,000 pounds, or nearly a half crop. The quality of the product is satisfactory.

Alsace-Lorraine has a small half crop, estimated at 4,950,000 pounds.

The principal hop-cultivating country of North Germany is Posen. It has harvested 2,750,000 pounds, equal to a middling crop.

The product of this district belongs to the finest in Germany this year, which is attributable to the exceptionally fine weather during the harvest season.

The Altmark harvested nearly three-quarters of a whole crop, or 2,750,000 pounds; the product is satisfactory.

Hanover is said to have yielded 4,400,000 pounds.

The Rhine provinces of Prussia raised about the same amount as Hanover and all the other provinces of Prussia together (West and East Prussia, Brandenburg, Pommerania, and Silesia), being about 6,600,000 pounds.

The hops cultivated in the united empire of Austria-Hungary are looked upon as being the best in the world.

Bohemia, the most prominent state of the empire with respect to hop culture, harvested over 13,200,000 pounds, which is more than a half crop.

The famous district of Saar (town of the like name and country surrounding the same) has a strong half harvest of good quality, estimated at 3,850,000 pounds. The Rothland yielded 4,400,000 pounds, the Grunland a full crop of 2,200,000 pounds, the Dauba 2,420,000 pounds, and the Auscha district below one-third.

Upper Austria, with a scanty half crop, has 990,000 pounds, while the yield in Steiermark is but a third, amounting to 550,000 pounds.

With the exception of Galicia, which harvested this year a two-thirds crop (880,000 pounds), the hop plant is but little cultivated in Hungary.

From the foregoing it will be seen that the united empire of Austria-Hungary harvested about 15,900,000 pounds of hops; after deducting the home consumption of 10,450,000 pounds there will be about 5,450,000 pounds left for the export trade.

PRICES.

The hop prices at this market (the largest of its kind in the world) are very high this year. With the exception of the year 1876, when best Spalt hops were sold at over 600 marks per cwt. (about $1.29 per English pound), the prices paid this season are the highest for a long period of time.

The following are the quotations for the week ending November 25, 1882:

Market hops (such as grow in the neighborhood of Nuremberg), prime quality, 93 cents per pound; others, 82 to 88.5 cents per pound.

Hallertau hops, from 86 cents to 97 cents per English pound.

Mountain district growth, from 89.5 cents to 94 cents per pound.

Würtemberg hops, 86.5 to 93 cents per pound.

Baden (none on hand), latest prices like hops of Würtemberg.

Posen, from 93 cents to 97 cents per pound.

Of Steiermark and Altmark hops none are on hand. The product of these districts was sold, three weeks previous, at from 65 to 83 cents per pound, but prices have since risen 15 to 20 cents per pound.

Old hops of the years 1879, 1880, and 1881 were sold at from 54 to 65 cents per pound, but at present there are none to be had; hops of later years sell from 21.5 to 28 cents per pound.

Bohemian hops fetch from 20 to 30 cents more than best Bavarian stock.

There is scarcely any other product of the soil that shows greater and more sudden fluctuations in its prices, from season to season, than the hop.

The following table, compiled from a very complete chart published by Messrs. Johann, Barth & Son, of this city, shows the average highest selling prices at the height of the season during the last twenty years.

The prices given below are for English pounds, the reduction of the mark to dollars being made at our custom-house valuation of the mark in gold at 23.8 cents:

	Cents.		Cents.
1860	104.8	1872	36.8
1861	21.6	1873	34.6
1862	33.5	1874	56.2
1863	27.0	1875	16.2
1864	34.6	1876	119.0
1865	43.3	1877	19.4
1866	45.4	1878	23.8
1867	17.3	1879	54.0
1868	10.9	1880	31.3
1869	49.7	1881	30.3
1870	11.9	1882	97.3
1871	55.1		

The prices for 1876 are the highest ever reached at this market, and were occasioned by the almost entire failure of the crops of that year. In the chart above alluded to, which extends back to the year 1800, there are some figures which are worthy of note.

From the year 1800 to 1850 prices varied from 12 marks per hundredweight to 385 marks. From 1821 to 1828 the average price was about 40 marks. In 1828 hops were down as low as 12 marks, which is the lowest quotation during the present century, but in 1829 they went up suddenly to 360 marks. From 1832, when the highest selling price was 375 marks, the price did not go beyond 300 marks until the year 1851, the average price for that period being scarcely 100 marks. In 1860 hops rose from 150 marks in the preceding year to 480 marks. From 1861 to 1875 prices averaged about 140 marks. In 1875 the price went up from 60 marks to 560 marks in 1876.

For Spalt hops, known as the best and the most in demand of all German hops, the average of the highest prices was as follows: During the years 1816–'20, 49 cents per pound English; 1821–'30, 30.6 cents per pound English; 1831–'40, 17.6 cents per pound English; 1841–'50, 35.5 cents per pound English; 1851–'60, 56.6 cents per pound English; 1861–'70, 49.1 cents per pound English; 1871–'80, 51.1 cents per pound English.

From the above statement it appears that during the last thirty years the prices for this product are gradually decreasing.

The increase during the decennium 1871–1880 is owing to the exceptionally high prices of the year 1876, when best Spalt hops were sold in this market for 620 marks.

Leaving this year out of the reckoning, the average price for the years 1871 to 1880 would be but 43.9 cents per pound.

Not even the finest brands, namely, Spalt and Neutomischler, show any positive advance in price during the present century, nor would a rise in their prices be of any great weight in estimating the general prices, for the above sorts form but a small portion of the total production and are used entirely for German and Austrian breweries. In the middle and lower qualities, which represent about 95 per cent. of the

whole German yield, no positive advance in prices during the present century is shown. These grades suffer especially in the English market (which, up to twenty years ago, received its entire outside supply from the Continent) through the competition of the much cheaper American hop, a competition that increases from year to year. The American hops are (according to German ideas) of very inferior quality, but are good enough for English brewers and as good as the class of German hops which have always been sent to the English market.

Thus the importation of American hops into England is steadily increasing, greatly to the detriment of the German planter, who has to produce at too high a cost to himself.

The expenses of the German hop-grower, in wages, in the cost of living, in the price of land and implements, in manure, poles, &c., have more than doubled in the last twenty to thirty years, while the prices of the product have been declining, so that, unless some means are devised for cheapening the production, the American hop will soon kill the German export trade to England.

The following table gives an exhibit of the quantity of hops raised in Germany for a period of ten years, and also the amounts imported and exported during the same period; the imports are principally from Austria. Amount in English pounds.

Year.	Quantity of hops produced.	Import.	Export.
1871	50, 600, 000	3, 450, 000	24, 700, 000
1872	40, 300, 000	3, 000, 000	19, 400, 000
1873	50, 450, 000	3, 150, 000	26, 400, 000
1874	36, 600, 000	4, 120, 000	21, 825, 000
1875	67 980, 000	3, 250, 000	30, 065, 000
1876	25, 190, 000	7, 460, 000	18, 190, 000
1877	58, 300, 000	4, 080, 000	21, 840, 000
1878	62, 830, 000	2, 445, 000	21, 920, 000
1879	37, 630, 000	4, 270, 000	22, 550, 000
1880	51, 600, 000	3, 140, 000	28, 645, 000
Average	48, 150, 000	3, 840, 000	23, 550, 000

The hop exports from this consular district to the United States are as follows:

1871	$86, 668	1877	$1, 975
1872	267, 571	1878	4, 536
1873	502, 568	1879	7, 948
1874	572, 989	1880	89, 480
1875	11, 571	1881	88, 063
1876	12, 448		

The value of hops exported from this district since the 30th June, 1882, up to the present time is $767,729, and the total for the entire season, 1882–1883, may be fairly estimated at over a million dollars, or about 1,100,000 pounds. The prices paid here by American buyers this season average 95 cents per pound.

G. HENRY HORSTMANN,
Consul.

UNITED STATES CONSULATE,
Nuremberg, November 29, 1882.

HOP FARMING IN EUROPE.

REPORT BY CONSUL HORSTMANN, OF NUREMBERG.

Last year a memorial was addressed to the Imperial German Ministry of the Interior by the German Society for Hop Culture asking for a yearly government subvention of 20,000 marks. It was proposed to establish at some suitable spot in one of the best hop districts in Germany an experimental hop garden, to be conducted on practical and scientific principles, through the experiences and results of which hop-growers in general throughout the country might profit.

For this purpose 60,000 marks were to be raised by voluntary subscriptions of hop-growers, dealers, brewers, and others interested in the matter; fifteen thousand marks of the above yearly allowance to be applied to paying the expenses of the undertaking; the other five thousand marks to be applied towards the expenses of model hop gardens in the several principal hop districts throughout the empire, and for other purposes, such as the founding of local associations for furthering the interests of hop-growers, the establishing of movable meetings of the German hop-culture associations, combined with public lectures at different places, the procuring of good plants (seeds and cuttings) for distribution, &c.; the publishing of annual reports on the extension of the hop plantations in general, and of their crops, at as early a period as possible; the publishing of the true prices of hops; the publishing of the experiences made, &c., in the culture of the plant; the establishing of exhibitions with prizes, &c.; the founding of associations for building warehouses where hops ready for the market can be stored, and where producers can obtain advances on easy terms on goods there deposited.

In stating the motives for making the above petition, the society gives many interesting facts concerning the present condition of hop culture in Germany.

The memorial sets forth that within the last forty years great changes and improvements have been made in the practice of agriculture in Germany; that the farmer strives to profit by the teachings of science, and that he now works more in accordance with exact principles than in his former empirical manner.

A great part of the soil of old Europe, which through generations of irrational handling had become quite exhausted, but scantily repaying the labor spent on it, has again been made fruitful under the processes which scientific experiments and discoveries and inventions have called forth, and the productiveness of the land and the prosperity of the crops have been greatly increased within the last few decenniums.

It is quite natural that in a matter of such vast and varied extent, and during the short period of time in which actual efforts have been made in its behalf, all branches of agriculture could not receive equal attention, and that the most necessary products for food of man and beast should be first and the most fully considered. Besides, with cereals whose growth is only of one year's duration, the results are more direct and appreciable than with fruits, vines, and plants used for flavoring, which only come to perfection during longer periods of time, and which require a much longer course of experimenting before any improvement in their quality or their yield can be established.

While, therefore, great progress has been made in the culture of those

plants which represent the actual necessaries of life, but little has been accomplished in developing those which supply us with its delicacies, or supply us with material either for making or coloring our fabrics.

Something has, indeed, been done towards improving the condition of the fruit orchards, the vineyards, and the flax fields, but still too little. More attention has of late years been given to tobacco; but in Germany no plant has been so much neglected in its culture as the hop, which still remains in a quite primitive condition. In former years it was a source of wealth to most planters, but now there is scarcely any plant that offers so little inducement for its extension. The existing plantations deteriorate in productiveness from year to year, and being in many districts the principal resource of the farmer, exert through his old-fashioned manner of handling them a bad influence on the productiveness of other crops.

The hops as soon as plucked and dried are eagerly bought up by dealers who travel through the various districts, and paid for in cash, and as there is no other crop that brings so much ready money to the farmer in the fall, he gives all his attention to and heaps all his manure on his hops.

Scientific research, which has done so much in the furtherance of some branches of agriculture, has not been extended to the hop-vine, and there is no other plant concerning which it is so difficult to form any approximate conjecture as to the quality and quantity of its yield as the hop.

While in other branches of agriculture information is promulgated by the various State, district, and local associations, so that the farmer is fully posted in regard to all new improvements in implements, manures, modes of culture, &c., the hop-grower is left entirely in the dark, and has to depend on his own resources.

The consequence is that he works in the same manner as his grandfather and great-grandfathers before him. There has been a decline in the productiveness of the vine because it has been raised on the same ground uninterruptedly for centuries, and the quality of the fruit, besides, has rather deteriorated than improved.

In England, where the hop culture is also in a bad condition, but where, as compared with Germany, noteworthy improvements in the growing and the handling of the hops have been introduced, the average yield per hectare is over 18 cwts., or 805 pounds per acre; while in Germany the average yield is scarcely 10 cwts., or 445 pounds per acre.

For instance, the average yield per acre in the Prussian province Posen is 267 to 311 pounds; Saser district, 311 to 360 pounds; Nuremberg-Altdorf district, 360 to 445 pounds; East Prussia, 400 to 445 pounds; Spalt district, Bavaria, 445 pounds; Pfaffenhofen district, Bavaria, 534 pounds; Würtemberg, 534 pounds; Hersbruck, Bavaria, 623 pounds.

In the few German districts where there are larger yields than in England, as for instance Upper Alsace the Prussian-Altmark, and in Nassau, such increase in quantity is always at the expense of the quality, and such hops have to be sold at ruinous prices, so that in the end the producers will have to discontinue the raising of hops altogether.

In general, in the German Empire, hops are losing both in quantity and in quality instead of gaining.

It is maintained that in order to raise the condition of the German culture from its present low standing it is necessary to find out and make generally known better and cheaper methods in planting, in manuring, in tending, and in handling. In the first place, manual labor, which is always the most costly, must be reduced to a minimum.

Digging machines, such as are used in England and America, are quite unknown here.

In many of the hop districts eventhe plow is not used, but all the digging and turning is done with the spade and the hoe.

The old-fashioned system of running the vines on poles is still in general use here, and should be superseded by wires.

The hop vine grows and flourishes better when run on wires, requires less attention, and is less liable to be attacked by parasites and insects than when run on poles. The poles often form nests for certain dangerous insects; the first cost is often greater than that of wires; they do not last so long, and even tend to shorten the life of the vine itself, for on poles the vine is cut off while yet in a green state, and its bearing period is thus reduced thereby at least 50 per cent., so that pole hops seldom bear longer than twenty years. The poles have to be renewed every twelve to fifteen years, while wires will last from thirty to forty years.

In regard to manuring, it is necessary to improve the present system, and to make extended trials of different substances, for the German farmer knows of scarcely any other manure for his hops than what is taken from his stables or his compost heap. If, in some scattered parts and in some few cases, trials have been made with special or with artificial manures, such as are used in England, in great quantities, the results have not been satisfactory because such trials have not been sufficiently prolonged and have not been carefully made, and the special character of each particular soil not taken into consideration.

The farmer, disgusted with not finding an immediate improvement, has in all such cases fallen back on his accustomed ways, and either gluts his plant with too much stable manure and compost, or, on the other hand, manures it too seldom or too little or not at all. The decline in the quality of the German hop which is everywhere complained of is evidently principally owing to the irrational manner of manuring.

In England, a washing apparatus with injector has been applied for many years for freeing the vines of insects, and the sulphurator is in general use for curing the plant of the diseases to which it is liable, and also as a prophylactic.

These things are quite unknown to the German grower, and his vines suffer from year to year more and more from the ravages of disease and of insects. His ignorance and indolence in this respect have caused him immense losses in the productiveness of his vines. The Belgian Government appointed a couple of agents last year to make investigations regarding the state of hop culture in Europe, and these gentlemen asserted that although the climate and the soil of Germany were more propitious to the raising of fine hops than any other country, yet that, in general, this culture was in a very backward condition because so little is done by the government for its benefit, and because the farmers themselves are still in such a state of ignorance and indifference, and that finally, in the picking of the hops and their treatment afterwards, in drying, &c., millions are lost through inaccuracy, carelessness, and want of understanding on the part of the producers.

G. HENRY HORSTMANN,
Consul.

UNITED STATES CONSULATE,
Nuremberg, November 29, 1882.

CROPS OF ASIA MINOR.

REPORT BY CONSUL STEVENS, OF SMYRNA.

The accompanying table giving the quantity and value of the principal crops raised in this province (Aïdin) for the year 1882 has been prepared with much care, and is as nearly correct as it is possible to make it with the limited and imperfect sources of information at command.

The local and provincial authorities do not appear to employ any system for the collection of commercial and agricultural statistics, or any other kind for that matter, and dependence must therefore be placed almost wholly upon data in the possession of private parties.

It is indeed only by laying under contribution facts and information held by merchants, brokers, manufacturers, and producers, and making comparisons and averages based thereupon, that crop-raising statistics even approximately accurate can be procured.

The ascertainment of prices is much easier, but even here reliance must be placed upon the statements of interested parties, in which there is more or less of variance.

A chief obstacle in the way of accurate crop reports is the disposition of producers to understate their crops to avoid taxation.

All farm products, except neat cattle, are taxed directly and heavily, and so every farmer who owns his land is interested in making his yield appear as small as his temerity will admit; for if detected in the act he might lose it all, if not his liberty also.

The past season has been an unusually dry one. From May until November no rain fell except on one or two occasions, and then in small quantities. And yet the drought has not lessened appreciably, if at all, the quality or quantity of the crops.

Heavy dews supplement the winter rainfall and enable the tiller of the soil to realize a fair return for his labor, even with the primitive methods employed.

That the yield of all the staples might be greatly augmented under a modern system of tillage goes without saying.

But the peasants are, for the most part, averse to any change of method, manifest a distaste to improvements of all kinds, and interpose an active resistance to the introduction of easier, more productive, and more scientific methods of farming. Economical practices are unknown to them, and to gain more than is sufficient to supply their daily needs is their last thought. Inferior bread, cheese, rice, vegetables, and olive oil suffice for their sustenance, as they did for their ancestors ten centuries ago.

These remarks apply particularly to the Turkish peasants. The Greek farmers, especally those in the vicinity of Smyrna, are more amenable to modern ideas and show a disposition to pattern after European methods. What effect their example will have upon the slow-going Turk remains to be seen.

A change must come sooner or later, for the spirit of progress is felt even in the heart of Asia Minor, and is seen in the construction of railroads and telegraphs. The time indeed may not be distant, if proper efforts are put forth by our enterprising American manufacturers and merchants, when this region will furnish a large market for their improved and patented agricultural implements.

Already there is some demand for these articles, and could an agency be established in Smyrna for their exhibition and sale, it might be increased largely.

The few dealers in agricultural and mechanical wares show an interest in American productions, but they are timid and order samples only.

Could our trade and industrial illustrated journals issue special editions in Greek and Turkish text much more would be accomplished in this direction.

The agricultural population of this province is estimated at about 450,000 souls, two-thirdsof whom are Turks and the remainder Greeks.

The Turkish peasants are of two classes, settled and nomadic. The former work the fields, the latter raise cattle and have no permanent place of abode.

The tillable land is divided into large farms and separate fields, having different owners. The large farms are usually cultivated on joint account with peasants, the owners supplying the implements and seed. After deduction of land taxes and titles, the owner appropriates one-half of the products, the other half being divided between the laborers. Some farmers lease their fields at the rate of 4½ bushels of barley or 2¼ of wheat per acre. Small farms are cultivated by their owners themselves.

The raising of live stock is one of the chief resources of the peasants of this province, as it requires but little care, and, with the exception of sheep and goats, is exempt form taxation.

This live stock consists of cattle, horses, donkeys, mules, camels, buffaloes, goats, and sheep.

The farm fruit and vegetable products are wheat, barley, maize, millet, lentils, beans, pease, figs, raisins, apples, pears, peaches, apricots, cherries, pomegranates, walnuts, chestnuts, almonds, oranges, quinces, cotton, hemp, flax, tobacco, opium, anise-seed, rope, &c.

The fig, raisin, and olive-oil crops are among the principal resources of the province, and constitute the larger part of the exportations.

Fig-tree cultivation is a specialty, and is successfully carried on. The figs are dried and packed before shipping.

The process of packing is, in the season thereof, one of the industries of Smyrna.

Large shipments are annually made to Europe and America.

The vines producing the well-known red, black, and Sultana raisins, for which there is always a demand in the United States and in Europe, yield abundantly, and the fruit when just ripened is very palatable, but will not bear exportation in this state.

Like figs, they must be dried before they become an article of international commerce.

There are also many olive trees, yielding large quantities of fruit, from which is extracted oil of superior quality.

The yield of these last-mentioned crops the past season has been an average one.

Returning now to the accompanying table, it should be remarked that it gives no index to the amount of exportations from this port, as Smyrna is the principal exporting depot for nearly all the products of Asia Minor.

The table includes only the chief products of the province of Aïden, comprising 35,000 square miles, and containing a population of about 980,000.

It cannot be compared with previous crops, as no trustworthy reports are at hand, but it is the opinion of those best informed that the crop is an average one in the matter of the principal staples.

W. E. STEVENS,
Consul.

UNITED STATES CONSULATE,
Smyrna, December 21, 1882.

Table showing the approximate quantities and values of the principal crops raised in the province of Aiden during the year ending December 31, 1882.

Articles.	Approximate quantities.	Average prices.	Approximate values.
Barley.....bushels..	4,000,000	$0 52 per bushel ..	$2,080,000
Beans.....do..	200,000	72 per bushel ..	144,000
Cotton.....cwts.	150,000	11 60 per cwt	1,740,000
Figs.....do..	115,000	7 00 per cwt	805,000
Gum tragacanth.....pounds..	200,000	53 per pound..	106,000
Maize.....bushels..	300,000	80 per bushel ..	240,000
Nut-galls.....pounds..	250,000	16 per pound...	40,000
Olive oil (from last year's olive crop).....gallons..	6,150,000	38 per gallon..	2,337,000
Opium (crop of Asia Minor).....pounds..	530,000	3 00 per pound...	1,590,000
Poppy-seed.....cwts..	18,000	3 10 per cwt	55,800
Raisins:			
Black.....cwts..	385,000	3 20 per cwt	1,232,000
Red.....do..	187,000	5 00 per cwt	935,000
Sultana.....do..	275,000	6 00 per cwt	1,650,000
Scammony.....pounds..	28,000	8 75 per pound...	245,000
Valonia.....cwts..	660,000	2 80 per cwt	1,848,000
Wheat.....bushels..	3,000,000	1 60 per bushel ...	4,800,000
Wool.....cwts..	30,000	14 20 per cwt.....	426,000
Total.....	.....	.....	20,273,800

THE WINE TRADE OF ANDALUSIA.

REPORT BY CONSUL OPPENHEIM, OF CADIZ.

I have the honor to forward herewith a short review of the year's wine crop and viticultural prospects of this consular district, along with a communication on the same topic received from our consular agent at Jerez.

ERNEST L. OPPENHEIM,
Consul.

UNITED STATES CONSULATE,
Cadiz, October 27, 1882.

THE WINE TRADE OF WESTERN ANDALUSIA.

The territory within this consular jurisdiction producing wines fit for the over-sea export trade is mainly comprised within the two provinces of Cadiz and Huelva. The following tables show the average annual yield and that for 1881 and 1882 in each district:

1. *Field of the province of Cadiz.*

Districts.	Yield of an average year.	1881.	1882.
	*Butts.**	*Butts.**	*Butts.**
Jerez de la Frontera	32,000	19,000	11,000
Puerto de Sta. Maria	12,000	10,000	8,000
Chiclana	12,000	9,000	7,000
San Lucar de Barrameda	15,000	9,000	8,000
Chipiona	5,000	2,600	4,700
Rota	1,500	1,000	1,200
Total...	77,500	50,600	39,900

* Of 500 liters each.

Yield of the province of Huelva.

Districts.	Yield of an average year.	1881.	1882.
	*Butts.**	*Butts.**	*Butts.**
Moguer	11,000	4,000	5,000
Rociana	9,000	3,000	4,000
Boyullo	9,000	3,000	4,000
La Palma	5,000	1,500	2,000
Villalba	4,000	1,500	2,000
Bonares	3,000	1,000	1,300
Manzanilla	3,000	1,000	1,200
Almonte	3,000	800	1,500
Triguero	2,500	700	1,000
Lucena del Campo	2,000	600	1,000
Villarrasco	1,500	800	1,000
Palos	1,000	300	600
Paterna Escacena and San Juan	1,000	500	800
Total	55,000	18,700	25,400

* Of 500 liters each.

The wines produced in the province of Huelva are generally put on board ship at Cadiz, though recently quantities of the low grades for export to France have been shipped to that country from the port of Huelva. The vintage generally takes place here from the middle of September till late in October, making it difficult at this date to give a decided opinion as to the quality of this year's yield; yet, in view of the favorable weather enjoyed during the vintage and pressing time, there is a general belief that this year's wine will turn out fine. The quantity, however, has, as shown by the above tables, been ruinously affected by the lack of rain, and it is therefore very doubtful if any but the best situated vineyards have been remunerative to their owners this year.

Thus far the phylloxera has not appeared in the wine raising districts of Western Andalusia; other scourges have, however, been a thorn in the side of the wine culturist, the oïdium being by far the worst. This, however, has been successfully combated by sulphur, and the use of sulphur is now continued in this district as a preventive measure, and may now be said almost to form a part of the regular routine of vine cultivation here.

The export of sherry and kindred wines had, a few years ago, reached very high figures, but has of late years undergone a period of retrogression, which is ascribed to various reasons, one of them being the alleged growing popularity of French wines in the English market, heretofore the great outlet for the better Spanish crus.

It must be borne in mind, however, that the retrogression spoken of only applies to values, for, although exact statistics are wanting, there is very little doubt that the aggregate quantity of the Spanish wine exports never was greater than now, only amongst the wine now shipped there is a very large proportion of low grades, and the better wines bring lower prices than in the past.

The export from the two provinces under consideration have been as follows:

	1880.	1881.
From the province of Cadiz ..... liters..	23,984,000	37,400,181
From the province of Huelva ..... do...	8,400,000	7,486,500

In the province of Huelva the stocks are low, and, moreover, mostly consist of young wines; but in the districts of Jerez, Puerto de Sta. Maria, San Lucar, and in the city of Cadiz there are considerable stocks

of the better class of wines, whilst the inferior grades have been much reduced by the great demand of the French market for them. As to prices, it may be broadly said that a double movement has taken place during the last years; there has certainly been a fall in the prices of the higher class wines, though, of course, some specially fine or fancy crus may have held their own, whilst the wines of low quality have appreciated considerably.

It is gratifying, in this day of adulteration of every kind, to be able to give a fairly good account of the purity of the Spanish wine product.

Alcohol is certainly used to fortify low-grade wines sufficiently to allow them to undergo transportation and violent changes of temperature, but this is believed to be the only ingredient in general use of which it can be said that it is not itself a grape product.

The wines are of course sweetened, colored, and flavored to suit the taste of the different markets, but this is almost universally done by mixing and combining natural wines of different flavors and degrees of sweetness and strength.

The formulas for the different combinations are carefully preserved, and it is thus that the larger firms are able to supply their customers year after year with wines that do not vary appreciably in bouquet, body, and taste, which is of course impossible where each year's product is sold separately.

In view of the special importance to our trade of the Jerez district, I forward herewith a report upon the wine crop and topics connected therewith, furnished me by our efficient agent, Mr. Richard H. Davis, of Jerez.

2. WINE TRADE IN THE JEREZ DISTRICT.

Since the commencement of the year an almost uninterrupted drought has prevailed in the province of Cadiz, affecting the result of the wine crop in the Jerez district most prejudicially. The average yield* of the Jerez vineyards, which cover some 15,000 acres, is computed at about 45,000 butts, say 5,850,000 American gallons, whereas this year's produce is certainly considerably under 18,000 butts, or 2,370,000 gallons.

The vineyards termed "albarizas" *i. e.*, on white calcareous soil, and on which the choicest wine is produced, suffered most severely, and as these vineyards cover three-fourths of the above-mentioned area, the loss of the Jerez wine-growers cannot be underrated.

The "barros" (clay) and "arenas" (sandy) vineyards, which yield the commoner growths, have not suffered so much, though the crop even there does not exceed one-half of an average yield.

For next year the outlook is, however, still more gloomy, as in consequence of the drought the vines have become stunted and the new shoots, on which the fruit should be borne next season, are so small and insignificant that some proprietors have actually handed over portions of their estates to ordinary laborers, the yield, whatever it may be, being given in compensation for the expense of cultivation.

It is still somewhat early to judge of the quality of this year's wine, but it is generally supposed that it will not prove of more than medium merit.

The stock of wines in Jerez, owing to a succession of short vintages, is not computed at more than three or four years' consumption, and with the prospect of a still shorter crop in view next year, holders of stocks naturally hold out for good and enhanced prices.

* The figures here given include, besides the district of Jerez proper, also the adjacent district of Puerto de Sta Maria.

The principal feature in Jerez exports is the continued demand from France for light young wines, and the steadily increasing shipments to the United States, where sherry appears to be taking a steady hold on public taste, and where the finer qualities are gradually but surely beginning to be appreciated.

The demand from other parts continues about the same as last year, though there is a slight falling off in the exports to Great Britain.

So far the phylloxera has not invaded the Jerez wine districts, but as it continues to ravage the neighboring Malaga vineyards, there is no reason why this scourge may not at any time make its appearance in Southern Andalusia.

The bad harvest and short vintage have resulted in many thousands of laboring hands being thrown out of employment, and have entailed much suffering upon the agricultural classes.

Bread disturbances have been frequent in this town, and there are frequent cases of attacks upon farms by bands of plundering peasants. Detachments of cavalry are constantly patrolling the country round about Jerez and the neighboring villages, but have considerable difficulty in keeping down these bands of marauders.

The government, with a view of relieving the distress of the unemployed in the district, has pushed forward public works at different points, offering 8 reals (40 cents) per day to common laborers, but, strange to say, comparatively few have availed themselves of the opportunity of obtaining work. The Jerez vineyard laborer may be said almost to prefer starvation to taking wages below what he has been in the habit of getting and considers a fair price for his labor.

RICE TRADE OF ITALY.

REPORT BY CONSUL DUNCAN, OF NAPLES.

Among the consular reports made to the Italian Government, I find the following statistics of the exportation of rice from Burmah for the last five years, which I think may interest our American rice-growers, especially those of my own State, South Carolina. These exportations were—

	Tons.
For the year 1877–'78	574,765
For the year 1878–'79	648,594
For the year 1879–'80	728,384
For the year 1880–'81	841,013
For the year 1881–'82	928,123

As will be observed, the increase from year to year was regular and rapid, indicating a very prosperous business. The value of the exportation for the year 1881–'82 is estimated at 53,795,000 rupees or nearly $25,000,000. Of this considerably over half was shipped to Great Britain and her possessions, and the remainder for the most part to other European countries, though 15,000 tons is put down to "South America" and 1,600 tons to "North America." A considerable quantity came into Italy, though Italy is herself a large rice-growing and rice-exporting country.

RICE IMPORTATION INTO ITALY.

Apropos to this, I see from an official report of Italian imports and exports for the first nine months of the present year, that the importa-

tion of rice amounts to about 6,000,000 francs in value more than for the corresponding nine months of last year. This certainly seems rather strange for so important a rice-growing country as Italy, and reminds one of the saying "carrying coals to Newcastle." How is it that the Italian rice-growers do not clamor for a protective duty? From all accounts they are a most extraordinarily poor and miserable class, and stand in the greatest need of better remuneration for their labor, and yet, instead of an import duty on rice, there is actually an export duty of one lira per 100 chilos on Italian rice. The most rabid free-trader could hardly approve of such discrimination against an important article of home production.

Our American rice-growers, instead of having an export duty, have a protective duty of 2½ cents per pound or $5.62½ per 100 kilos (225 pounds), and, I see, are still not satisfied, but have been urging on the Tariff Commission the necessity of increasing it. If the poor, miserable rice-growers of the Po Valley could only secure one-fourth of this protection they would doubtless regard themselves most fortunate. It is true the millions of rice consumers in Italy would probably object to being thus taxed in the interest of a comparatively small number of rice producers. But if they had the patriotism of American consumers of rice and peanuts, and iron and wool, and other highly-protected articles, they would find consolation in the thought that they were fostering an important national industry against the "pauper labor" of Burmah.

B. O. DUNCAN,
Consul.

UNITED STATES CONSULATE,
Naples, November 4, 1882.

TRADE AND INDUSTRIES OF MILFORD HAVEN.

REPORT BY CONSULAR AGENT KELWAY.

I herewith report on such features and commercial relations of this port as may be of interest to the nation I have the honor to represent in this district.

Milford Haven, as is widely known, is a port of refuge, and enjoys as such a fine geographical position, and it is to be regretted that these and other natural advantages have hitherto not been turned to better account.

A company has been incorporated of late years to construct floating and graving docks, but owing to some cause or causes best known to the directors, engineers, and contractors themselves, considerable disadvantages have been experienced, and during eight years the work has made very slow progress, and even ceased altogether at certain times for certain periods, as is unfortunately the case now. It is to be hoped, however, that all their arrangements, however imperfect hitherto, will be in order before long, and the works go on in earnest to completion, under a penalty, within a given time, as the opening of these docks is supposed to open a new field of traffic for this port, and more especially so as this may lead to the establishment of the regular mail boats between here and the United States, this being the shortest route.

The imports consist of a few cargoes of timber from the Baltic and North America, &c., for the royal dockyard and merchants at Pembroke Dock and Pembroke, five miles up the Haven.

Of exports there are none, except limestone, which foreign timber-vessels take away occasionally, instead of ballast, at 2*s.* 6*d.* per ton free on board.

At Veyland, also five miles up the Haven, opposite the royal dock-yard, mail boats run daily each way between this place and Waterford, taking goods and passengers, and are in connection with and owned by the Great Western Railway Company.

A regular line of steamers runs between here and Cork, also, three times a week, taking goods and passengers.

There is situate at Pembroke Dock, in this Haven, Her Majesty's dock-yard, where some of the largest and heaviest iron-clads have been built for the British navy. There are two private iron-shipbuilding companies carrying on business within the Haven, one at Milford and the other at Pembroke, where some fine steamers and ships have been built, and are at present building. Still, so far as the Haven generally is concerned, it is merely of importance as a port of refuge for vessels wind-bound and in distress or seeking shelter. It is famous for its good anchorage, great depth of water and capacity, being 20 miles in length, navigable for smaller vessels throughout, and about 12 miles for larger ones; besides this it is a perfectly free port, where no harbor dues are levied; vessels enter and leave this port without being subject to any formalities whatever, unless they come for the purpose of discharging, loading, or for orders, when pilotage is compulsory at the rate of 2*s.* 6*d.* per foot for vessels drawing under 14 feet, and 3*s.* 6*d.* per foot above that draught of water.

A deep-water iron pier exists, having a line of railway connecting it with the Great Western line, and from this pier it is possible to load coal by means of hydraulic tips; vessels of any size may also use the pier for discharging and reshipping cargoes in the event of such being necessary in order to repair the vessel, but as yet no warehouses are constructed.

Besides the docks constructing there is really only one suitable private dry-dock in this port, which is at Pembroke Dock; its length is about 250 feet, breadth 48 feet, depth of water about 12 feet in the spring tides.

The Milford docks, however, when constructed, will accommodate ships of any size; size of dock being 60 acres, lock 570 by 70 feet; graving dock, 710 by 96 feet; small graving dock, 290 by 46 feet; depth over sills at springs, 36 feet; neaps, 28 feet; depth of water in dock, 26 feet.

The entrance to the harbor is excellently lit by a high and low light-house on the north side of the Haven, and leading lights on Great Castle Head on the way up to Milford.

H. KELWAY,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Milford Haven, November, 1882.

SILK HARVEST OF THE DROME.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

One of the departments under my consular jurisdiction is that of the Drome, which is entered one hour by rail from Lyons.

With a population (census of 1881) of 313,763, this country has long been renowned for its silk industry. In Chabeuil, Montélimart, Louol,

Romans, Nyons, Beamont, Bois, and thirty other townships, there are to be found silk-reeling factories, or, as they are called in French, filatures.

Numerous silk-throwing mills are located at Taulignan, Montélimart, Crest, Dieu-le-fit, Romans, Livron, and thirty-five other townships.

The silk industry of the department is represented as follows:

Filatures and throwing-mills working on grege (raw silk).

Reeling basins	2,247
Swifts and spindles	90,476
Operatives (men and women)	17,875
Horse-power	905
Number of establishments	247

Working on spun silk.

Number of establishments	33
Horse-power	199
Operatives (both sexes)	1,636
Spindles	24,370
Looms (in operation)	326

Such at least was the condition of the silk industry a few years ago, and though there was a diminution for some years after, owing to the continued devastation by silk-worms' disease, the final disappearance of this plague has again so revived this important interest that I think the foregoing figures may be taken as not very greatly exaggerating the actual conditions. In fact, the happy results of the latest crop has given a new impetus to the silk industry, and everywhere (not only in the department of the Drome, but elsewhere in France) there is manifested a "revival" of this once lucrative commerce.

The present season has been especially favorable for the silk interest of the Drome.

According to official figures the cocoon crop has been remarkably good. The quantity of eggs hatched gave 64,367 ounces; *i. e.*, 53,153 from native eggs, 5,550 from different foreign species, and 5,600 from Japan cards.

In 1881 the quantity of eggs was but 59,265 ounces. The increase of 5,102 ounces reported, therefore, for this year, should be credited entirely to native seed. The Japan cards, on the contrary, have lost ground.

Last year the official figures showed 12,022 cards, from which, and considering previous years, it may be reckoned that the breeding of Japanese eggs will soon rest in the silk-raising departments of the Midi of France only as a souvenir. Here are the official figures for the silk-cocoon crop of the Drome for 1882 and 1881:

Districts.	1881.	1882.
	Kilograms.	*Kilograms.*
Valence	668,948	731,370
Montélimart	404,894	567,783
Die	269,362	342,676
Nyons	284,993	238,597
Total	1,628,197	1,880,426

Being an increase for this year's récolte over 1881 of 252,229 kilograms, or of 15½ per cent. This result is due in part to increased breed-

ings, and in part to the superiority of the seeds, which have yielded this year 29.2 kilograms of cocoons per ounce to 27½ in 1881.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, October 2, 1882.

EXPORTS OF FRENCH SILKS.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The export of silk goods from France to foreign countries for the first nine months of the present year, inclusive of ribbons and trimmings, has amounted to $47,227,100.

For the same period in 1881 the total exports for the same class of goods amounted to $33,530,469, being an increase in exports from this year of $13,696,631.

Examining closely these figures, I find that of pure silk goods, *i. e.*, goods manufactured solely and exclusively from silk, the exports for the first nine months of the past three years have been as follows:

1880	$12,933,596
1881	12,980,047
1882	18,867,089

or an increase of nearly $6,000,000 over the nine months of the two preceding years.

The imports of pure silk goods for the same period have considerably decreased, to wit: In 1881 they were $4,246,000; in 1882 they were $3,860,000; decrease, $386,000.

Of mixed silk goods (silk goods mixed with cotton, wool, &c.) the change has been from $1,737,000 in 1881 to $1,158,000 in 1882, or a decrease of $579,000.

This exhibit should be considered as advantageous to the silk-manufacturing interest of Lyons, where *pure silk* goods are more largely manufactured than in any other city of the world.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, October 25, 1882.

THE COCOON CROP OF ITALY.

REPORT BY CONSUL PEIXOTTO, OF LYONS, FRANCE.

The silk association of Milan have just published a table showing the quantities and the prices of cocoons in the different market places of Italy for 1882.

I have been able to secure an early copy of the original, and believing the same to be of interest to our silk growers and manufacturers, I beg to inclose a copy, which I have carefully verified.

THE ITALIAN COCOON HARVEST OF 1882.

Quantities and prices on the principal markets of Italy.

PIEDMONT AND LIGURIE.

Markets.	Yellow cocoons.		Green cocoons.	
	Quantities.	Prices.	Quantities.	Prices.
	Kilograms.	*Francs.*	*Kilograms.*	*Francs.*
Albe	36,798	5.10	2,811	3.56
Alexandrie	147,070	4.83	104,547	3.84
Asti	424,600	5.14	1,290	3.85
Bra	62,010	.....	93,590	.....
Carmagnole	29,200	.....	38,500	.....
Casale	54,604	4.89	3,673	3.53
Casal Magiore	35,000	4.15	6,250	3.15
Cavour	14,860	5.10	44,430	4.16
Ceva	87,850	.....	49,670	.....
Chivasso	36,450	4.64	17,780	3.53
Cunéo	101,730	3.49	386,820	4.79
Fossano	38,700	5.02	81,100	3.89
Ivrie	32,100	4.88	1,290	3.66
Mondovi	159,470	.....	72,110	.....
Novare	177,961	4.62	123,882	3.67
Novi Ligure	71,030	4.85	3,690	3.55
Pignerol	76,670	5.15	109,380	4.09
Racconis	275,720	5.15	139,140	4.09
Saluce	112,950	.....	.....	.....
Savigliano	35,500	.....	15,000	.....
Turin	251,720	4.90	23,690	3.98
Tortone	41,611	4.66	2,631	3.61
Total	2,303,604	.....	1,371,214	.....

LOMBARDY.

Bergamo	23,452	4.22	67,887	3.68
Brescia	241,152	4.18	116,643	3.42
Carnvaggio	6,400	4.22	24,960	3.68
Como	11,649	4.75	65,754	3.85
Crema	28,715	4.37	193,348	3.35
Province of Cremone	237,533	4.18	2,350,676	3.23
Lodi	157,318	4.23	190,227	3.45
Mantua	83,581	4.33	110,268	3.50
Milan	11,233	4.61	232,848	3.91
Pavia	45,426	4.58	19,137	3.33
Sondrio	300	4.30	1,400	3.60
Stradella	86,186	4.35	15,526	3.48
Vigevano	22,255	4.61	26,777	3.38
Voghera	169,035	4.69	64,915	3.52
Total	1,124,235	.....	3,480,366	.....

EMILIE (DUCHÉS AND ROMAGNES).

Bologna	167,000	4.33	.....	.....
Cesena	55,877	4.40	.....	.....
Faenza	13,180	4.46	.....	.....
Forlimpopoli	11,917	4.54	.....	.....
Imolo	34,538	4.52	.....	.....
Meldola	67,646	5.55	.....	3.36
Modena	97,042	4.59	506	3.67
Parma	299,711	4.86	16,029	4.26
Plaisance	164,330	4.95	54,140	3.42
Reggio-Emilie	123,297	4.61	16,763	4.24
Rimini	89,074	5.03	3,505	2.58
Savignano	15,532	4.42	.....	.....
Scandiano	8,013	4.39	142	1.98
Vergato	10,243	5.03	.....	.....
Total	1,295,815	.....	95,585	.....

The Italian Cocoon harvest of 1882—Continued.

MARCHES AND OMBRIE.

Markets.	Yellow cocoons.		Green cocoons.	
	Quantities.	Prices.	Quantities.	Prices.
	Kilograms.	*Francs.*	*Kilograms.*	*Francs.*
Ancona	44, 087	4. 54		
Cagli	5, 658			
Camerino	4, 233	4. 47		
Citta di Castillo	2, 719	4. 68		
Fano	34, 056			
Fossombrone	100, 904			
Jesi	189, 910	4. 50	19, 393	
Macerata	67, 267	4. 40		
Osimo	39, 269	4. 60		
Pergola	7, 170			
Pérrouse	9, 363	4. 64		
Pesaro	150, 680	4. 59		
Recanati	40, 870	4. 54		
Sinigaglia	28, 814	4. 29		
Spolette	1, 262	4. 67		
Verni	17, 441	4. 57		
Urbino	9, 643	4. 64		
Total	753, 346		19, 393	

TUSCANY.

Arezzo	196, 378	4. 85		
Figline Valdarno	57, 850	5. 05		
Pisa	44, 605	4. 97		
Pontedera	49, 545	4. 03		
Prato	22, 300	4. 72		
Sienne	141, 400	4. 54		
Total	512, 078			

VENETIA AND FRIOUL.

Goritz	30, 165	2. 45	831	
Venice	36, 129	4. 19	169, 824	
Verona	3, 881		21, 734	
Vincencia	132, 556	4. 48	950, 292	
Total	202, 731		1, 142, 681	

ABRUZZO (ABRUGGES).

Civitella	3, 881	4. 60		
Total, general	6, 195, 690		6, 089, 865	

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, October 25, 1882.

DUNDEE AND ITS INSTITUTIONS.

REPORT BY WILLARD B. WELLS.

Dundee is really a progressive town; its manufacturers, merchants, and ship-owners are enterprising and public spirited, and its working class intelligent and generally fairly educated.

POPULATION.

The population is now estimated at 145,000, of which a larger proportion are females than in other towns or cities in this country. This is due to female labor being chiefly required in the jute factories. The births here average 5,066, and the deaths 3,434 annually, leaving a natural increase yearly of 1,632. The following table shows the—

Progress of the population of Dundee (Scotland) from 1821.

Years.	Population.	Increase in 10 years.
1821	30,575	.....
1831	45,355	14,780
1841	62,794	17,439
1851	78,931	16,137
1861	91,664	12,733
1871	120,724	29,060
1881	142,454	21,730

As many of the buildings in Dundee are old, and some of the central streets narrow and crooked, the general appearance of the town is sombre and dull. Within recent years, however, much has been done to improve the thoroughfares by widening and erecting substantial structures of a regular and tasteful order of architecture, conspicuous for containing handsome dry goods and other stores. This town returns two members to the British Imperial Parliament. The last election expenses of these gentlemen were, for the senior member $17,000, equal to about $2 per vote, and for the junior $6,275, equal to about $1 per vote polled in each case.

PUBLIC SPIRIT.

The political opinions of Dundee citizens are thoroughly liberal, or rather radical. The people are keen politicians, and seem to have a good grasp of the burning important questions agitating this country at present, such as a rectification of the antiquated land laws still in existence in Scotland, &c.

GROSS RENTAL.

The gross rental of Dundee for 1881–'82 is £659,675; and the assessable is £595,576. The local taxation amounts to about 75 cents per £1 of assessable rental.

LIGHTING.

The electric light for illuminating purpose is largely superseding the use of gas in Dundee. A company is in existence here which advertises that with electricity they can supply a cheap and suitable illuminant for hotels, shops, public halls, and factories. The gas commissioners municipal board) of this town are finding this company to be a con-

siderable competitor in furnishing light as several of the jute works and public institutions are now being lighted by electricity.

SANITARY.

The health and sanitary condition of Dundee is on the average (notwithstanding the numerous mills with tall chimneys emitting volumes of smoke) very good, being well drained; and the broad and deep tidal river Tay running past the town carries off all unhealthy accumulations. The death rate is the second lowest of the large towns in Scotland, being an average of 21½ per 1,000 of population when no special epidemic is raging.

The water supply being copious and good is therefore conducive to cleanliness and good health.

Crime in Dundee has diminished during the past year, there being 431 fewer apprehensions, and the crimes have been of a less aggravated kind than in former years. Drunkenness is the greatest source of criminal offenses of every nature here. Although an influential temperance crusade has been going on in this town for about a year, yet the experience of the best authorities in Dundee and statistics go to prove that the movement has not sensibly affected the habits of the debased classes. Those who appear most frequently before the police court are habitual drunkards, and the superintendent of police here says, "Were they dealt with by substantial cumulative sentences, the deterrent and reformatory effects would be much increased."

PUBLIC INSTITUTIONS.

The authorized strength of the Dundee police force is 154 men.

Institutions intended for the amelioration of criminals, the poor, and the destitute are numerous in Dundee. The following are a few of these beneficent organizations:

The Prison Aid Society, which endeavors to find employment for discharged prisoners of both sexes, and thus to put them in the way of doing well.

The Industrial School, for the reformation of juvenile criminals, boys and girls.

The Mars Training Ship, a floating reformatory for boys, which has been established for thirteen years, and done an incalculable amount of good, as the lads when discharged almost invariably turn out well.

The Female Rescue Home, for the reclamation of fallen women.

The Curr Night Refuge, for giving a night's shelter and food to outcasts and wanderers, built at a cost of $35,000 by the Curr trustees, who were empowered to spend the funds with which they were intrusted for the benefit of the miserable and degraded. Hence this most charitable institution which was opened in this town a few months ago.

The Dundee Orphan Institution, which is a home for orphan boys and girls.

The Blind Institution, where the blind are educated and taught handicrafts.

The Royal Infirmary, the Convalescent Home, &c.; and then there are the free circulating and reference libraries, reading rooms, museum, and fine art gallery—all in one building—which are a great boon to the working classes here and by them much appreciated.

It has been remarked that the citizens of Dundee are liberal and public-spirited. As a proof of this, it may be mentioned that a wealthy

lady, yet alive, belonging to one of the old families of this town, has given the munificent sum of $600,000, which amount has been supplemented by $50,000 by a Dundee gentleman, the whole to be devoted to the erection and endowment of a college or university of arts and science in Dundee, in which the branches to be taught will be classical literature, Latin, pure mathematics, natural science—including chemistry, physiology, natural history, geology, and botany—natural philosophy, and mental philosophy. It is hoped this college will teach medical studies, English literature, history, and modern languages. A prominent place is to be given to instruction bearing on the mechanical arts, local manufactures, political economy, and the laws which regulate trade. Students will be able to graduate at this college, as it is to be affiliated to some Scottish university.

Another Dundee gentleman has handed over $50,000 to the school board of this town for the erection of a school for secondary education here, to enable the children of the working classes to get such a secondary course of study as will prepare them to enter, if they desire, the Dundee college. This same gentleman has also given $100,000 to be devoted to the use of the high school of Dundee, with the object of improving it and founding a rectorship, so that the education and training to be acquired at this seminary may be of the best and soundest nature.

Dundee is to be congratulated in having such generous citizens, while still living giving so largely of their private fortunes and taking so practical an interest in the advancement of education.

RAINFALL AND TEMPERATURE IN DUNDEE.

A circular was received at this office from the Department of State, dated April 3, 1879, instructing that a table showing the humidity of each month of the year should be embraced in the annual report from consulates. The following table furnishes this information, together with the temperature prevailing:

Rainfall, &c., at Dundee, Scotland, for year ending September 30, 1882.

[Diameter of funnel, 3 inches. Height of top: Above ground, 4½ inches; above sea-level, 167 feet.]

Month.	Total depth.	Greatest fall in twenty-four hours.		Number of days on which .05 inch or more fell.	Hours of sunshine.	S. R. thermometer, maximum.	S. R. thermometer, minimum.
		Depth.	Date.				
	Inches.					*Average.*	*Average.*
October	4.55	1.65	13th	18	88	50	39
November	3.40	.55	4th	17	47	49	39
December	1.65	.40	11th	12	51	41	32
January	1.25	.30	2d	9	42	45	37
February	1.85	.50	12th	8	75	47	37
March	2.20	1.35	1st	14	106	50	37
April	4.35	2.65	13th	14	118	49	37
May	1.80	.50	7th	12	228	59	41
June	3.00	.65	22d	15	169	63	47
July	3.90	.55	14th and 23th	21	174	67	50
August	1.65	.60	28th	10	161	68	50
September	2.00	.45	1st	12	131	61	44
Total	31.60	.....	.....	162	1,420	.....	.....

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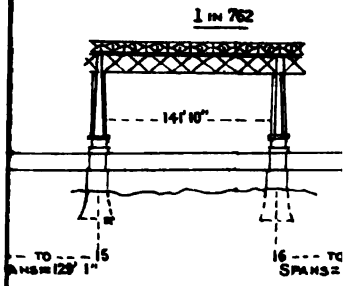

TION OF THE SEVERAL GIRDERS.

TEEL GIRD

DESIGNE

THE NEW TAY BRIDGE.

The contracts for the building of a new bridge across the Firth of Tay at Dundee have been accepted by a large firm, who have commenced operations on the work. Not much visible progress is yet apparent, as the time has been principally occupied in collecting plant and appliances, in erecting workshops, and making other necessary preparations for carrying on the undertaking. Judging from the designs published, the bridge will be a handsome and substantial viaduct, and will cost, it is estimated, $3,500,000. It is to be built on the girder principle, of the best wrought iron, sufficiently wide for a double line of rails throughout. Every effort has been made in the preparation of the plans to give effect to the different recommendations of the special commission who inquired into the reasons for the old Tay bridge disaster, so as to remove all doubt as to the stability of the new structure. The railway company associated with this bridge have lost a large yearly revenue since the fall of the old bridge, and they are therefore anxious to have the new bridge completed as quickly as possible. About four years, it is expected, will be required to execute the work, but the general opinion amongst practical men is that it will be six years before the structure is finished. The following are very complete published sketches showing details of the new Tay bridge, and also the Forth bridge. From these drawings a capital idea of the immense dimensions and general appearance of these viaducts can be obtained.

FORTH BRIDGE.

Referring to the foregoing designs, it will be seen that this bridge is quite unique in the plan of construction, and is to be a much more gigantic undertaking than the new Tay bridge as respects strength and breadth of spans. The main girder is to be within a few feet of a mile in length. It is to rest on round cylindrical piers, each of which will weigh 16,000 tons. The vertical pressure on the top of the pier from the weight of the superstructure, rolling load, and wind pressure is estimated to be 8,000. This gives a pressure of about 6 tons per square foot. The question has arisen as to obtaining a foundation sufficiently strong to carry so great a weight. But it is asserted that the bed of the Forth is of such a nature as to insure safety in this direction. The material to be used is steel throughout, for the sake of lightness. Altogether, about 42,000 tons of steel will be required for the whole bridge. The task of arranging how to sustain this huge mass poised in the air, seeing the spans are to be so extraordinarily wide, is considered a great engineering achievement, without taking into account the additional weight of a railway train running across. The cost of the work is estimated at $7,500,000. Very little if any of the building has been done yet, and grave doubts are expressed by engineers and the press of this country as to whether the project is practicable and will be carried out.

WILLARD B. WELLS,
Consul.

UNITED STATES CONSULATE,
Dundee, October 10, 1882.

COFFEE TRADE OF SANTOS.

REPORT BY CONSUL WRIGHT.

The production of coffee was already fast outstripping consumption when, early in 1880, the Brazilian Government saw fit to become an exporter of the article, with the view of placing funds abroad to meet its obligations, instead of, as hitherto, making remittances in bills of exchange; thus entering the Rio market as a buyer in competition with legitimate exporters, and upsetting for the time being all calculations as to exchanges, not only preventing the then natural decline of prices out here, but really causing an advance to a point relatively above the simultaneous market value abroad, and depressing all foreign markets by throwing their shipments almost *in toto* upon one, New York, especially at that time, when a combination was endeavoring to "corner" coffee, thereby causing greater caution on the part of the general trade and anxiety in Europe that New York might be compelled to ship part of her stocks thither.

The operation of the government resulted in a loss stated to amount to at least 800,000 milreis, to say nothing of its consequences upon legitimate mercantile trade. As a matter of course, I would not allude thus to this transaction had it not been so freely discussed in and out of Parliament, and in commercial circles everywhere for some time past, as to place it beyond the pale of official reserve.

Looking at the then tremulous state of the coffee trade (so often before afflicted by speculative rings which resulted disastrously), owing to the visible and increasing overproduction everywhere as compared with consumption, it is considered to have been unwise on the part of the government to have struck the first blow at the downward tendency, because if left to merchants regularly and legitimately in the trade, they would have known how to have met the anticipated natural changes. But even this was denied them by the public assertion of the successor to the minister of finance who executed the commercial measure alluded to, that he approved of the course of his predecessor, and would repeat the operation if he saw fit, whilst the operation has lately been defended in the Imperial House of Representatives, although ably contested. All this causes nervousness in the trade now, as for some time past, lest such an operation might suddenly be predicated.

There are those who believe that the Brazilian Government is interested in the great Havre ring, but I am not one of them, however plausible their deductions drawn from the past may appear. It may be that the operation I have alluded to may have given birth to the hope of these wealthy French speculators that it might be repeated either wholly or on account with them, but they have apparently been left to carry their own burden. They may have been and may still be influenced by the hope that the reported negotiations between Brazil and France may result in a commercial treaty, resulting in a diminution of the exorbitant French duty on coffee, amounting to more than the invoice cost, with freight and marine insurance added, so as to offset some recompense on this side for the importation of real French wines, instead of the Hamburg concoctions imported and sold as French.

In my No. 66, dated January 16, I spoke of the Havre ring, with its enormous coffee stock hanging as an incubus over the trade, and so it has

continued. In September its Havre stocks were represented to have cost £3,000,000 sterling, against the market estimated value £2,000,000 sterling, or a straight loss of £1,000,000 sterling, not including expenses of "carrying," previous losses, &c.

Several large failures also have occurred there; yet a re-enforced concern seems to have been organized, and are apparently determined to continue the same course. Why Santos and Santos coffee should have been alone selected for these speculative operations is puzzling, but so it is. Certain is it also that the Brazilian coffee trade has changed, assumed a new form; for whereas formerly the large importers sent out orders and letters of credit for purchases of large parcels and cargoes for sale there to jobbers, nowadays these very jobbers have become importers, and to such an extent that the old importers are almost driven from the field. Nearly all the firms in Santos and Rio have head or branch houses, or partners, or agents abroad, through whom they offer to sell for immediate or future shipment a given quantity of coffee, quality as per type sample there shown, at a fixed price in foreign money, this price including invoice cost on board and freight. This enables the jobbers and retailers to buy out here instead of there, where they were so often in the meshes of speculative cliques. Now they know that on a certain day they will have their supply and its cost, they running no risk except the loss of the vessel, and hence their expected supply, all other risks falling upon the vendor here. They obtain letters of credit just as others do, and settle for the drafts drawn in virtue thereof payable at ninety days after sight in London, Paris, Frankfort, &c., just as readily as if they made the purchase in warehouse at New York, Havre, Antwerp, Hamburg, &c., on sixty days' credit, to be paid for in cash as "taken from store, with discount." But the system is a bad one, and may yet result seriously, and this seems to be the opinion of many who shun such, on a principle well founded. The risks run by the party out here are many and serious; amongst them, quality sold not obtainable, prices advanced, exchange rates advanced, rates of freight advanced, absence of steamers and vessels, rainy weather preventing shipments within specified time, fires, &c. If all these are to be feared in contracting for shipping "short," how much more for "long" delivery?

I am informed that coffee has been sold to Havre, quality and price agreed upon, for shipment here all along up to end of March, 1883. Coffee is therefore sold which may not exist, as myriads of pods or dried berries are still on the bushes, and may or may not inclose beans or burnt, oilless kernels. Then again, this is a rainy climate, and the main stem of our railroad system may again be damaged on the Serra and traffic interrupted, as we have often seen before, thus stopping supplies, which would of course interfere with the fulfillment of these future-delivery contracts. Nothing can show more plainly how the trade has been cut up than Table V, in my dispatch No. 84, made up from the invoice book of this consulate, containing the number of invoices certified to. The number for 1882 would have been greater had not a large buyer in New York, for its roasting purposes, opened branch houses at Rio and here and ship their coffees in large invoices. The small invoices then point to the fact that the consignees are many, and perhaps a number of them are in our interior cities and towns.

Laying aside the Havre operations, the same is the case with Europe, where it seems many cities and towns have their respective little combinations for importation and division amongst individual members thereof. A house here not long ago shipped per steamer to Hamburg 2,000 bags, divided or cut up into fifteen invoices for delivery all over

Germany, at different points. I was told that the largest invoice was for 1,000 bags. This house is one of the oldest, wealthiest, and most reliable import and export firms here, able to do what they wish, but nothing with type samples, futures, or speculation as now conducted. You will thus see that the Brazilian coffee trade has been broughtdo wn nearly to a Ceylon writer's notion of "plantation to cup."

The prices of coffee here are very low as compared with former years, and much is being said and written about it both here and abroad, and the government and associations are engaged in promoting the display of samples in Europe and the United States, with the view of bringing Brazilian, especially Santos, coffee better before consumers. If an exportation of 1,500,000 bags cannot show what Santos coffee really is, I fail to see how a few finger-picked samples, showing what it can and ought to be, but representing what cannot be had, can have any good effect. Far better would it be to have an exhibition of samples of coffee from other producing countries at some central point in the province, where the planters might go and see that planters in those countries send to consuming markets for *sale* the same coffee that their own cooks, after picking and washing out stones, chaff, &c., roast and prepare for the table. No one can or will deny that the flavor of Santos coffee is not equal to any other, but it hurts the planter to see it quoted so much below others abroad, and to be told that it is mixed with and sold as some other kind at the quoted market price for such kind. Nothing more reasonable than this, for if the planter deems it more to his interest to send down for sale his crop containing one-fourth stones, dirt, unsightly, valueless, black, and ashy beans and husk, he ought to expect it to be sold at a price here which will allow some margin for cleaning it abroad and putting it into the same condition for roasting and drinking as he himself uses.

Too many coffee trees have been planted, and hence the fruit not properly harvested and prepared for market, and planters are reported as confessing this. Well-prepared coffees are sent down and fetch relatively high prices, both here and abroad, but being exceptions, are not generally quoted. And if the actual low prices here leave a loss to the planter, which, however, I do not believe, he must blame himself in tacitly protecting the high and exorbitant railroad freight charges. These railroads pay dividends at the rate of ten to fourteen per centum per annum. All but one are native enterprises, in many instances many planters being large shareholders, who grumble at low coffee prices, but not at their railroad dividends. The railroad freight and charges average 5 milreis on every bag of coffee sent to Santos; the average sale price to-day is about 17 milreis per bag (60 kilograms or 132 pounds), not including very ordinary and triage, of which there is a large quantity in store, not worth on an average over 9 or 10 milreis per bag, which, deducting all other charges, will leave little or nothing for the planter. The planter must now clean his crop very much better so as to send down a better quality, send down a smaller quantity, and obtain comparatively higher prices, paying, or rather not paying, freight on unsent trash, and cause railroads to be satisfied with less income and smaller dividends; otherwise Mexico may teach them a severe lesson.

WM. T. WRIGHT,
Consul.

UNITED STATES CONSULATE,
Santos, October 21, 1882.

SPANISH CUSTOMS.

REPORT BY CONSUL MARSTON, OF MALAGA.

I have the honor to inclose to Department a translated copy of a royal order upon the subject of vessels carrying empty bags for the safe storage of cereals on board ship.

H. C. MARSTON,
Consul.

UNITED STATES CONSULATE,
Malaga, September 29, 1882.

[Translation.]

Circular transmitting a Spanish royal order, by which it is decreed that bags carried on board for the storage of cereals shall be considered as ship's stores.

GENERAL CUSTOMS OFFICE,
September 14, 1882.

The minister of finance has communicated to this general office, under date of the 22d of August last, the following royal order:

SIR: Whereas a suit, No. 2, '82, was instituted by the custom-house at Carthagena, in consequence of a fine of 4,350 pesetas imposed on the captain of the English steamer Cimbelgue for having included in the list of provisions a quantity of empty bags, which fine was exacted in conformity with Par. 13 of Art. 213 of the Customs Regulations, and was remitted by the "delegado de hacienda" (financial agent) of Murcia;

Whereas the number of vessels employed in the conveyance of cereals is large, and those vessels carry the bags necessary for the safe stowage of the cereals in their holds;

Whereas many ships' masters, and especially captains of British vessels, carry the bags as a necessary part of the ship's stores, and merely declare them in the list of provisions referred to in Art. 47 of the Customs Regulations, and not in the certified manifest;

Whereas this proceeding gives rise to fines because the bags are not categorically enumerated among the ship's stores mentioned in Art. 47, above referred to;

Whereas in the many cases in which fines of the nature referred to have been imposed, they have always and invariably in equity been remitted as an act of justice, on account of its being recognized not only that it is necessary to carry such bags, but also that they have been, in perfect good faith, omitted to be inserted in the certified manifest:

Therefore His Majesty (whom God preserve), agreeably to the suggestions of this head office, has resolved as a general order:

(1.) That the empty bags carried on board for the stowage of cereals shall be considered as ship's stores, the captain being required to declare them in the list of provisions, and produce them at the moment of leaving the port to the official appointed by the collector of customs, to verify the fact of the said bags being on board.

(2.) If the captain should require to use the bags referred to for stowage in a Spanish port, he must previously declare the fact to the customs, in order that they may verify it and take acconnt of the number of bags employed, inasmuch as it will not be possible to produce them at the clearance visit on the ship's departure.

(3.) That the captain who cannot prove at the time of the ship's sailing that he has on board the number of bags declared on entry, shall pay a fine of from two to ten times the duty on those which may not be forthcoming.

I communicate this to you by royal order, for your information and guidance, &c.

Madrid, September 14, 1882.

P. ALCANTURA DE EZEIZA.

TARIFF CHANGES IN BRAZIL.

REPORT BY MINISTER OSBORN, OF RIO JANEIRO.

In my dispatch No. 14, dated February 25 last, I called attention to the fact that there was pending in the House of Deputies a bill for the reduction of the tax upon coffee to 3 per cent. This measure failed to pass; but there was afterwards introduced a bill reducing the export duties on coffee, sugar, cotton, and maté 2 per cent., and increasing the import duties on all articles taxed 10 per cent., which bill passed both houses and received the imperial sanction, and went into operation on the 9th instant.

EFFECT OF TARIFF CHANGE ON COFFEE.

The effect on the coffee market was very great, as it gave to those who were holding coffee in foreign markets and to those who had shipped just prior to the 9th the disadvantage of competing with those who had the benefit of the reduction.

As the margin of profit on coffee is very small, the difference of 2 per cent. must entail great losses to the large shippers who were caught with heavy stocks.

The planters complain that with this reduction even they will meet with immense losses on this year's crop, as the yield is enormous, and the foreign markets being overstocked, the selling price is kept low. In In some instances planters are gathering but part of a crop, as they say it will not pay to transport it to the market.

The former government tax on coffee exported was 9 per cent., to which was added a provincial tax of 4 per cent., making a total of 13 per cent. The government tax is now 7 per cent., and the provincial remains unchanged.

The price of coffee is lower than it has been for many years.

The increase of 10 per cent. in the import duties will of course come out of the pocket of the consumer.

I inclose an article on both subjects, taken from the Rio News of the 5th instant.

THOMAS A. OSBORN,
Minister.

LEGATION OF THE UNITED STATES,
Rio de Janeiro, November 15, 1882.

[From the Rio News, November 5, 1882.]

The new additional tax of 10 per cent. on imports, together with the increase in warehouse charges and the reduction of 2 per cent. in the export duties on coffee, sugar, cotton, and maté, are to go into execution on the 9th instant. On and after that date the additional tax on the schedule rates will be 60 instead of 50 per cent. The new rates for the customs warehouses will be one-half per cent. for the first month, which will be collected on all entries, whether they remain in the custom-house or not. For two months the tax will be 1 per cent. per month; for three months, 1½ per cent. per month; and for periods exceeding three months, 2 per cent. per month, or 24 per cent. per annum—the tax being levied upon the duties imposed upon the goods. The effect of these laws can be no other than the restriction of importation. The mercantile classes will be obliged to import on shorter time and to carry lighter stocks, for the simple reason that the increased duties and warehouse taxes will increase the cost of

goods to just that extent, with a consequent increase in the amount of capital tied up in stock. Of course these increased taxes will be met by either an increase in the prices on goods or an equivalent decrease in the quality of the goods. In either case the consumer will pay the tax and suffer the hardships. The loss to the mercantile classes will spring from the restrictions upon business and decreased consumption. These are simply the elementary factors in this problem of taxation, but they seem to be as yet but little understood in parliament and in the government. They have yet to learn the mysterious workings of a tax upon middlemen. In the matter of the reduction in the export taxes on coffee, sugar, cotton, and maté, the step is one in the right direction, and should be hailed with pleasure. After the 9th the general export tax on coffee will be 7 instead of 9 per cent., the provincial tax of 4 per cent. remaining unchanged.

TAXATION IN MADEIRA.

REPORT BY CONSUL DU PONT SYLE, OF FUNCHAL.

I beg to supply the following information in regard to taxes, called for by section 420 and 421 of the Consular Regulations of 1881:

SEC. 420. Consuls in Madeira who do not engage in business, and who do not own real estate, pay no taxes.

SEC. 420. Consuls who do not engage in business, and who yet hold real estate, pay on the real estate.

SEC. 421. Consuls who engage in business pay the same taxes as any other merchant, without distinction of nationality, to wit:

Property tax (on houses and land).—There has been no valuation made for ten or twelve years, but I should think about 13 per cent. on the nominal value of the estates would be correct for this year. Next year it may be 10 per cent. or 15 per cent.

2. *Sumptuary tax.*—A. For one horse, $5; for two horses, $12; for three horses (about) $20, &c. B. For one man-servant, $1.75; for two men servants (about) $4.50, &c. It is impossible to ascertain at what rate this tax increases. All you can find out is, the more you have the more you pay.

3. *Tax upon house-rents.*—Ten per cent. on your rental.

4. *Industrial tax.*—Sixty dollars a year for the privilege of being a merchant. As it would be obviously unfair that a merchant doing a large business should pay the same tax as one doing a small one, the merchants of any district are allowed to divide up their assessment among themselves. Thus, if there be ten merchants in a town, the government must have $600, although by mutual agreement one man may pay $20, another $40, another $65, &c.

In this connection, the following extracts from a book recently published in London, "Portugal, or the Results of a Liberal Government," may prove interesting, and to be relied upon:

* * * Tax upon industry; one of the most baneful, most hateful, and most unjust taxes that can well be imagined. The results of its working, as well as the general state of the country, may be inferred from the fact that the amount it produces has been steadily decreasing during the last three years, in the latter (*sic*) of which it realized less than in 1869, in spite of increased percentages and improved methods of extortion. * * *

The working of this tax is as follows: The cabinet, authorized by the parliament, draws up occasionally, and publishes as law, a tariff which comprehends every trade or profession throughout the country. All the towns and villages are divided into six classes, by the number of their inhabitants. A sum is then fixed which each tradesman is to pay, according to the classification of the locality in which he resides. For instance, a shop-boy in the capital must pay, say, ten shillings tax, but a shop-boy in a small village, although earning higher wages perhaps, pays but two shillings and sixpence. Again, a tailor, although keeping a shop of the most modest appear-

ance, will have to pay exactly the same tax as a wealthier colleague in the most aristocratic part of the same city, who makes as large a profit in one week as the poor man does in a twelvemonth. This is so flagrantly unjust that the law allows a resource. In each town or city the assessors of the taxes find out how many tradesmen of each kind it contains, and then make the following calculation:

Ten tailors in this town, at £10 each for taxes, makes a sum of £100 which the tailors must pay to the state; but as some can decidedly afford to pay double tax, while others will be overcharged at one-fourth part, let the tailors meet together and divide the £100 charge as fairly as they can among themselves, and the state will accept from each the sum the majority decided he is able to pay.

The last tariff published appeared but a short time back. It enumerates 493 trades or professions, which are to pay a different sum according to the locality in which they are exercised.

There are six classes of localities—*ergo*, about 3,000 items in the tariff. The tax ranges from £62 per annum for bankers, insurance companies, &c., in the largest cities, down to half a crown yearly, which is to be paid by the peripatetic tinkers, milkmen, old-clothes men, and others who reside in the sixth-class villages.

5. *Additional tax for the year.*—Six per cent. on the total of your taxes.

Should the republican candidate be defeated in the coming election, I shall doubtless have to inform you of the imposition of more taxes.

L. DU PONT-SYLE,
Consul.

UNITED STATES CONSULATE,
Funchal, November 16, 1882.

AMERICAN PORK IN HOLLAND.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

As the agitation in Europe respecting American pork has not yet subsided, and shows even far greater vitality than trichinæ ever did, and as it appears that even Germany is about to be allied to France in making war upon the American hog product by prohibiting its importation, I concluded to bring to your knowledge what recently took place in this country, with reference to this matter.

By the order and under the supervision of the minister of the interior an investigation was made as to the occurrence of trichinæ in pork imported from the United States.

The investigators made a report on the subject to the government, which was published in the Staats Courant (official journal) in November last, but it did not come under my notice until a few days ago.

I should have liked to have furnished the Department with a translated copy of the entire report, but as it is very lengthy, and I cannot manage to get it properly translated within any reasonable time, I subjoin hereto only the introductory remarks, the result of certain experiments made, and the conclusions reached by the investigators, viz:

Acting upon a suggestion made by the board of inspectors for the sanitary supervision of the State, to institute an inquiry on an extensive scale, as to the occurrence of trichinæ in American pork, and as to the danger thereby incurred, the minister for the home department had, in the latter end of the year 1881, instructed the sanitary inspector for the province of South Holland to suggest in what manner such an inquiry might be held as to the pork imported at Rotterdam from America.

The mode of inquiry accordingly proposed by the latter met with the approval of the minister, and it was thereupon determined that the investigation was to be held, under the supervision of the undersigned, by a few persons qualified for that purpose, who had offered their services, and who were to pursue their labors according to rules fixed uniformly for all.

These investigators were Dr. F. I. Dupont, who had moreover taken upon himself to conduct the whole of the inquiry at Rotterdam; Dr. W. Nolen, Dr. H. I. Feth, professor of natural history at the higher burgherschool in Rotterdam; Mr. W. A. L. Legebeke, municipal apothecary, and three young ladies (one of whom has a diploma entitling her to teach natural history at middle-class schools), who have given most satisfactory proofs of their ability in using the microscope, and in detecting trichinæ.

In order to have sufficient certainty that the investigation of all the samples would be effected according to the same rules, full instructions were framed for the guidance of the investigators, with which they all bonnd themselves to comply.

Succeeding the above preliminary remarks comes a recital of the rules in accordance with which the inspections had to be and were made, and a full description of the labor performed by the investigators.

The investigations continued over a period of several months, during which eighteen hundred samples of American pork, bacon, and ham were thoroughly and closely examined and inspected, resulting in the discovery of trichinæ in thirty-three of the samples.

The report then closes as follows:

The proofs that were taken have led to the following results, viz:

With boiled pork, containing trichinæ, were fed: one young pig and two rats, all three with negative results.

With raw American pork, containing trichinæ, taken from pieces sent to the investigators, were fed: two young pigs, one young rabbit, and four dogs of about two years old. A careful examination led to the conclusion that all these animals, killed at various periods, did not suffer, or had not suffered in any way from trichinous disease.

Although the investigations and tests in a matter of this nature can never be sufficiently numerous to give claim to a scientific infallible conclusion, yet we consider that from the inquiry that has been held we may safely draw the following conclusions:

Among the pieces of American pork there are many that are more or less infected with trichinæ. Nearly two per cent. of the pieces examined were trichinous.

Notwithstanding the extensive consumption of American trichinous pork in the Netherlands, and more especially at Rotterdam, the trichinous disease has hitherto not been detected there. More than 6,000,000 kilograms of pork were imported from America in 1881 at Rotterdam alone.

It is possible that the habit of the Dutch people of always either boiling or roasting the said meat may greatly contribute to this result. Yet it is probably not always boiled or roasted so long as to secure that the trichinæ in the innermost parts of a large piece are infallibly killed.

Proofs taken with animals by feeding them with boiled and raw American trichinous pork have shown that it was eaten by them without any injurious effects.

We have, therefore, every reason to presume that the strong pickling and smoking of the said meat has such an influence on the life of the trichinæ that during the many weeks or months that elapse between the slaughtering of the trichinous animals in America and the consumption of the meat in this country, they lose all vitality.

It has not appeared that the salted and smoked pork, as it is brought into the market from America, exposes consumers in this country to any danger from trichinous disease.

We purpose, at a later period, to report to your excellency on the proofs that are still being taken.

In conclusion we take the liberty to point to the expediency of causing an investigation to be instituted on an extensive scale as to the occurrence of trichinæ in native pigs, for which purpose a good opportunity will present itself as soon as the public slaughter-house at Rotterdam shall come into use.

UNITED STATES CONSULATE,
Amsterdam, January 11, 1883.

NOTES.

Department of the Rhone.—Consul Peixotto, of Lyons, reports to the Department of State, under date of October 11, 1882, that the official census (December, 1881) of the department of the Rhone had just been communicated to his consulate. This document shows that there are in this department two counties, twenty-nine districts, and two hundred and sixty-four wards or townships.

The census of 1876 gave the population at 705,470 souls; that now reported gives 741,470, or an increase of 36,339. The city and county of Lyons have a population of 569,731, and the county of Villefranche 171,739, thus making a total for the Rhone province of 741,470.

The six wards or arrondissements of Lyons are given as follows:

CITY OF LYONS.

	Inhabitants.
First arrondissement	65,985
Second arrondissement	75,549
Third arrondissement	93,155
Fourth arrondissement	35,049
Fifth arrondissement	54,446
Sixth arrondissement	52,429
Total for the city	376,613
Total for the county	193,118
Total for city and county	569,731
For the county of Villefranche	171,739
Total for the province	741,470

It is only within the last two years that there has been a tendency of the rural element towards the city. It seems now to be increasing. A few years ago Lyons afforded the singular example of depopulation towards the country or rural districts.

Silk Condition House of Lyons.—Consul Peixotto reports, under date of November 30, 1882, to the Department of State, as follows:

The silk condition house of Lyons entered and registered for the week ending Saturday, the 18th instant, 1,290 bales of silk, weighing 87,143 kilograms, against 1,697 bales, weighing 113,813 kilograms, for the corresponding week of 1881.

The past week has been like its predecessors, without tone or elasticity, and consequently without improvement. In fact, buyers are more persistant than ever in demanding lower figures, and in spite of the continued resistance of holders prices are slowly giving way.

Fine silk, grèges as well as worked, are still held firm, but the tendency is towards decline. Here are the latest quotations:

Tuscany greges 9–12, first order, 60 francs the kilogram.
Naples greges 10–12, first order, 61 to 62 francs.
Piedmont organzines, 20–24, first order, 70 francs.
Piedmont organzines, second, 67 francs.
Cevennes grèges 11–13, second, 62 francs.
Syrian orgazines (classic) 20–22, 66 francs.
Syrian orgazines (grand), first order, 68 francs.
Syrian orgazines, second order, 64 to 65 francs.
French orgazines (fil and worked) 24–26, first order, 71 francs.
Italian orgazines 18–20, first, 69 to 70 francs.

Italian orgazines, second, 67 to 68 francs.
China trams (French work), second order, 38–42, 55 francs.
China organzines (French work), second order, 38–42, 56 to 57 francs.
The large arrivals, by the last two steamers, of Asiatic silks have increased the heaviness of the market.
Manufacturers continue to complain of the extreme dullness, and two failures among commission houses are reported with liabilities exceeding $250,000.
Business at Paris and London remains inactive, and New York telegrams are scarcely more favorable. There are, however, quite a large number of American and British buyers at present in Lyons.
The following table will show the movements of the principal silk conditioning houses of Europe for the month of October of this year and of 1881, with the percentage of diminution:

Business of the principal silk conditioning houses of Europe for October, 1882 *and* 1881.

Cities.	October, 1882.	October, 1881.	Decrease for October, 1882.
	Kilos.	*Kilos.*	*Per cent.*
Lyons, France	405,446	549,842	26
Crefeld, Germany	41,025	57,198	28
Elberfeld, Germany	18,711	25,155	25
Turin, Italy	49,681	105,474	52
Zurich, Switzerland	76,324	84,293	9
Milan, Italy	307,365	429,990	28
Como, Italy	16,199	20,290	20

This exhibit shows a general decrease everywhere, and if the percentage is less at Zurich it is owing to the fact that American demand for her manufactures has increased in proportion to the change which has taken place since six months. At that time the demand favored only silk stuffs of rich quality, for which Lyons is so justly celebrated; now only goods at low prices and consequently of mixed or inferior materials are called for.

Exports of Hamilton.—Consul Leland reports to the Department of State, under date of October 26, 1882, that the aggregate value of exports from the district of Hamilton for the year ending September 30, 1882, was $3,283,318.83, being an increase of $665,848.61 over the total exports for the year ending September 30, 1881. The principal articles exported were animals, barley, eggs, malt, wool, and wheat; the increase in the exportation of animals consisted principally of store cattle, and sheep, and lambs for the Buffalo, Rochester, and New York markets. The increase in the value of barley exported is over $300,000. The increase in the value of eggs is over $150,000. The consul again suggests that a duty of at least one cent per dozen be imposed upon eggs, which are now admitted to the United States free of duty.

Steam Communication from Stettin to New York.—Consul Lincoln reports, under date October 19, 1882, to the Department of State, the establishment of a direct steamship line from Stettin to New York.

I have the honor to announce that the managers of the "Thingvalle" line of steamers, of Copenhagen, have determined to establish fortnightly communication between Swinemünde, the outer port of Stettin, and New York. This undertaking will supply a want long felt by this community, and undoubtedly contribute largely to increase the amount of direct traffic between this port and the United States.
The first steamer, the Geiser, for Stettin direct is advertised to leave New York on the 28th of this month, and the steamer Thingvalla for New York from Swinemünde on the 8th of November.

Import and Export Duties at Pernambuco.—Consul Atherton communicates the following report to the Department of State, under date of November 24, 1882:

I have the honor to report that the augmentation of 60 per cent. on the imperial duties is now collected at this port. There are no provincial duties. The former aug-

mentation was 50 per cent. The export duty on sugar has been reduced to 3 per cent.; on cotton and coffee to 5 per cent., being a reduction of 2 per cent. on each of the three articles.

The crop of sugar for this year is estimated by competent persons as being at least 30 per cent. less than last year. There is also a falling off in the crop of cotton.

They have commenced building one of the central sugar factories; it will probably not be finished in time for the next crop. These factories are to be established under a concession from the Imperial Government, and will enable planters to bring their cane to be ground at a fixed price; the roads will be made to convey the cane to the factory; these factories, it is thought, will increase the product of the sugar crop; as most of the sugar is made in a primitive way, those planters who have the modern improvements in their machinery get a much better price for their product; there might be a chance for American capital in these concessions, as there are several of them. The gradual extension now going on of the railway system of this province will largely increase the area of land available for the growth of sugar cane.

The few steamers running direct to and from the United States are not frequent or regular enough to increase the import trade from the United States to this country.

Silk-growing in Hungary.—Consul Peixotto, of Lyons, reports under date of October 23, 1882, to the Department of State respecting the results of silk-growing in Hungary during the year 1881:

The report of the Hungarian commission on the subject of silk-growing in Hungary shows that during the past year there were 2,976 growers, who obtained 41,537 kilograms of cocoons from 426 parishes, while the sale of the produce realized 41,816 florins (about $17,000).

This was a great advance on the previous year, when there were only 1,057 growers cultivating the industry in 196 parishes, and producing only 10,132 kilograms, which were sold for $4,800.

The present cocoon harvest has been sold to Italy for $25,000, and the profits thus realized are being devoted to the establishments of a silk-cultivation school, to which three training instructors are appointed by the Austro-Hungarian minister of education, and three by the minister of commerce. Three other appointments have been made by private efforts, so that very shortly nine teachers will be available to travel through the country and give gratuitous instruction in the art of silk-worm rearing and silk-winding. In the model school of Goertz one of the professors holds classes for the surrounding districts, and 80 kilograms of cocoons have been distributed to encourage beginners. The government has also planted 28,596 mulberry trees.

The report of the government commission concludes by recommending the planting of mulberry trees on all the commercial lands and roads, in addition to the establishment of spinning mills in every district.

Statistics of Suez Canal Traffic.—Consul-General Pomeroy, writing from Cairo, Egypt, under date of December 9, 1882, communicates the following statistics to the Department of State:

From January 1 to November 30, 1882, steamers of different nationalities to the number of 2,969, having a net tonnage of 4,667,497, passed through the Suez Canal. The dues received by the canal company during said period of eleven months amounted to $10,684,993. By adding the sum of $965,000 (the average monthly revenue) for December, the total receipts for 1882 would amount to $11,649,993, an excess of $1,930,000 over the aggregate revenues of 1881. The daily statements of traffic show that England takes the foremost rank in the navigation of this canal. Of steamers traversing 76.35 per cent. is English, and of the daily average number of ships entering the canal, which is set down as 8.88, it is calculated that 6.78 sail under the British flag.

Condition of Hayti.—Consul Goutier writes to the Department of State, under date of November 25, 1882, respecting the political, commercial, and financial condition of Hayti:

The Chambers have adjourned without enacting a single law for the benefit of agriculture; nor have they taken any measures with the view of ameliorating the political, commercial, or financial affairs of this country.

The political aspect of Hayti is far from being satisfactory; and this is owing in a great measure to the hostile attitude of the mulattoes towards President Salomon's administration. The origin of the President's hatred of the mulattoes, and his bitter denunciation of them as a class, is now a matter of old standing; but knowing the influence which the mulattoes wield, by their education and social position, he endeavored, in aspiring to the Presidency, to bridge over past difficulties. When elected President he extended to them the right hand of fellowship, and requested

them to aid him in administering the affairs of the country; but they called to mind his antecedents, and believing that his sentiments had not changed toward them they refused to respond to his friendly advances. They have not only looked upon him with distrust, but have used their talents and influence in discrediting, to a certain extent, his government abroad, by thwarting many measures he endeavored to have adopted for the country's benefit. They have kept up a feeling of uneasiness and insecurity in the country, and have annoyed him in every possible way.

The mulattoes have no paper which speaks for them, while the blacks have several, especially two that are published in Port-au-Prince, "L'Oeil," and "L' Avant Garde," both patronized by President Salomon, and these papers now and then contain severe articles against the mulattoes. The exiles—Boyer Bazelais and party—reply in the same spirit; and from Kingston, where most of them reside, there arrives a periodical flood of newspaper attacks denouncing President Salomon and his adherents.

The commercial position of Hayti is critical. With the low price of coffee, the country people will not pick the entire crop; consequently the merchant's means of remitting to his American and European correspondents will become limited, and as a matter of course his credit will be circumscribed. The importations will decrease as well as the government's revenue.

The annual coffee crop of Hayti is estimated at 60,000,000 pounds. The country people received at one time $12 per hundred, which made $7,200,000. Should the low prices continue, it is not expected that they will bring to market over 40,000,000 pounds, which at the price now paid, $4 per hundred pounds, will make $1,600,000, a difference of $5,600,000, which the people will be deprived of. The export duty of $3 per hundred on 60,000,000 pounds amounts to $1,800,000, while on 40,000,000 pounds it makes $1,200,000, a difference of $600,000 in the country's revenue.

The commercial embarrassments, as just stated, will tend to hasten the financial difficulties. The merchants who had been largely importing must make remittances, and not being able to do so in kind, must export specie. This will necessarily diminish the circulation. Our bank notes, not being accepted in payment of duties, will be depreciated, and ceasing to be a legal tender, will occasion considerable disturbance in our finances.

A limited circulation of specie, with a restricted circulation of depreciated bank notes, must embarrass our financial condition; while the exigencies of the government may again force them to flood Hayti with an irredeemable paper money.

From what I have briefly outlined, it may be seen that there is no chance of extending our trade with this country for some time to come. In view of this abnormal state of affairs, the disastrous result of which no one can forecast; when old, reliable firms may be shattered and swept away by this commercial whirlwind, instead of entering into any new transactions and extending business relations with Hayti, our merchants in the United States would do well to act with circumspection.

Consul Glover, of Havre, transmits the following statement to the Department of State under date of December 31, 1882.

Statement of direct imports into Havre, France, from the United States, for the quarter ending the 31st day of December, 1882.

Cotton	bales..	142,794
Coffee:		
Casks		3
Sacks		10,689
Sponges	bales..	259
Bark:		
Hogsheads		10
Packages		3,290
Horse-hair	bales..	51
Machinery	cases..	79
Pitchforks	do....	423
Oil:		
Cases		360
Barrels		2,467
Staves		146,024
Miscellaneous goods	packages..	1,634
Wool	bales..	17
Preserves	cases..	1,056
Orange peel	sacks..	100
Tortoise shell:		
Cases		2
Barrels		5
Cattle hoofs	sacks..	900

Hides and skins:		
Hides		601
Skins		112
Packages		101
Cocoa	sacks	143
Flour:		
Barrels		2
Sacks		3,053
Lard oil	barrels	315
Lard:		
Tierces		19,406
Tubs		12,090
Cases		700
Meats, salted	tierces	12
Pearlash	barrels	21
Tobacco:		
Cases		5
Hogsheads		4,682
Clover seed	sacks	8,808
Crucibles	hogsheads	71
Pigs' bristles	bales	46
Beef	barrels	229
Paper pulp	packages	1,779
Mahogany	logs	857
Lobsters	cases	374
Varnish	do	801
Paint:		
Cases		99
Barrels		120
Pearl shells	barrels	106
Platina	cases	6
Wheat:		
Tons		22,900
Sacks		161,537
Petroleum:		
Cargo in bulk		1
Barrels		60,547
Naphtha	barrels	8,687
Clay	casks	9
Indian corn:		
Barrels		2
Cases		70
Turpentine	barrels	2,714
Potash	do	180
Whalebone	packages	257
Perfumery	cases	6
Tallow	hogsheads	134
Fruits, preserved	cases	3
Alligators' skins	hogsheads	8
Vanilla	cases	8
Agricultural implements	packages	62
Silks	cases	31
Tar	barrels	10
Sewing machines	cases	686
Wood, manufactured	do	29
Moses	bales	13
Albumen	cases	36
Cabinet woods	pieces and logs	1,111
Corn meal:		
Barrels		2
Cases		5
Champagne	cases	179
Shells:		
Cases		23
Barrels		163
Handles	packages	1,237
Oysters	cases	25
Silver:		
Bars		37
Barrels		20

Blacking	cases..	122
Grass seed	sacks..	268
Lumber:		
Tons		1,300
Pieces		7,905
Mackerel	cask..	1
Baking powder	case..	1
Apples, dried:		
Cases		2
Barrels		11
Molasses	barrel..	1
Mint, essence of	cases..	20
Oars		2,788
Shrimps	cases..	50
Rice	tierces..	35
Charcoal	barrels..	200
Lampblack	do....	50
India rubber	case..	1
Pine-apples	do....	1
Seeds:		
Cases		10
Sacks		544
Wine	cases..	19
Cigars	do....	1
Iron casks, empty		50
Black lead	cases..	7
Herbs	do....	3
Chalk crayons	do....	3
Dyestuffs	do....	9
Whale oil	casks..	112
Pens	cases..	1
Hardware	do....	73
Hemp	bales..	100
Cheese	packages..	75
Sarsaparilla	bales..	18
Bananas	cases..	2
Specie	do....	1
Fish-roes	barrels..	150
Stationery, &c	cases..	6
Bones	sacks..	4
Fish-spawn	barrels..	325
Ore	sacks..	95
Phosphate	tons..	400

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COMMERCIAL RELATIONS OF THE UNITED STATES.

23330

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

No. 28—February, 1883.

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CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

FEBRUARY, 1883.

PART I.—GENERAL REPORTS.

PITCH LAKE OF TRINIDAD.

REPORT BY CONSUL TOWLER, OF PORT-OF-SPAIN, ON THE PITCH PRODUCT AND EXPORT OF TRINIDAD.

At the request of the Department, I have made the investigations embodied in this report.

I visited the so-called Pitch Lake, Trinidad, September 30, 1882, landing per steamer at La Brea, on the west coast of Trinidad, about 40 miles south of the port of Port-of-Spain. The lake in question is situated about 1½ miles from the shore. There is a gentle ascent of 140 feet from the shore to the lake.

The name "lake" is a misnomer, if we understand by the term a cavity containing a liquid. The contents of this cavity, or supposed cavity, is a concrete, slightly flexible mass of pitch; it is a level plain, on which bushes, and patches of vegetable formations, and pools of water are seen here and there over the surface. There is no difficulty in walking or wading over it from end to end, or from side to side. The shape of this plain is a sort of ellipse or ovoid. The water in the pools is rain-water, having a slight iron taste.

Arriving on the plateau I found, first, a number of chestnut-colored females washing and bleaching linen, and in other parts a number of two-wheeled carts, drawn each by a single horse, in the act of being loaded with pitch. Scattered here and there over the surface were to be seen dark, yellow-brown colored men with pickaxes digging out large clods of pitch, which boys gathered out from the pit and piled up for the carters. The pitch at almost every blow of the pickax broke off with a resinous fracture quite easily.

Each lump of pitch exhibited air cavities of the size of a pigeon's egg, larger or smaller. I was informed by the diggers that they never dig deep enough to find the pitch soft and plastic; but they asserted

that in the course of a couple of days the cavity which they had dug would be again level with the surrounding plain. This assertion, I think, must be taken with considerable reservation, for I do not believe there is now any force below that would cause the pitch to rise, and I discovered no *fumerolles* anywhere that would indicate an internal fire. Besides, wherever there is a water-pool there is an indication that pitch has been dug out. There is, however, a probability that the rough surface of a pit may be softened by the heat of the sun during the dry season, and thus partially leveled.

This pitch deposit, I imagine, like any other mineral deposit, will become entirely exhausted in the course of time, resembling in this respect our oil wells in Pennsylvania. But it will take a long time to do this, for the area of this visible deposit is about 100 acres, which is equivalent to 4,360,000 feet, and 4,360,000 feet surface and 1 foot deep will give the same number of cubic feet. Now, allowing the weight of 1 cubic foot of pitch to be 60 pounds (it is really more), we shall get by computation 261,360,000 pounds, which number divided by 2,240 gives 116,678 tons for the weight of a single layer of pitch on Pitch Lake 1 foot deep.

We will now suppose that 60,000 tons of pitch (this year 30,000 will be near the real amount) are dug out annually, we shall find that this first layer of pitch will supply the world for two thousand years.

How deep this pitch deposit is absolutely, is not yet known with accuracy, or even approximately. The whole ground, under a thin layer of soil or sand, to the ocean is pitch, and there is (I have been informed and have myself partially seen) an outcropping of pitch on the beach of the Gulf of Paria at different points for 5 or 6 miles north and south of La Brea. This deposit of bitumen, or asphalt, is, therefore, from all appearances inexhaustible for thousands of years to come.

Now, the first practical question that arises is this:

1. To whom does this deposit of asphalt belong?

It belongs to the colonial government of Trinidad, and the right of *exploitation* of the entire Pitch Lake, with the exception of five acres reserved for government purposes alone, is leased out to three parties, namely: Conrad F. Stoelmeyer (represented by his son Charles F. Stoelmeyer, and who is at the same time business manager for the company). T. A. Finlayem & Co. (representative of the London Asphalt Company), and Thomas Field (representing the American or New York Asphalt Company).

2. In what form is this asphalt shipped for exportation?

To the United States asphalt is shipped in a crude state, like clods of clay. In this form I would recommend it to be always imported to America, because it does not agglutinate in the transit, and may be even carried on the deck; secondly, because the price of the crude asphalt is much cheaper than that of the so-called épuré asphalt; and thirdly, because our means of boiling asphalt are altogether superior to the method at La Brea.

For the European market the pitch is made liquid by heat, in which state it is ladled out into flour-barrels, and allowed to concrete by cooling. One hundred such barrels, filled with pitch, weigh about sixteen tons.

The crude pitch is transferred from the shore to the ships in boats estimated to contain five tons each.

3. At what price is this pitch delivered on vessels on the coast for exportation?

From invoices in the consulate the price is as follows:

	Per ton.
Crude asphalt	$1 25
Cartage	1 00
Boating	82
Export duty	18
	3 25

4. To what ports in the United States is asphalt shipped?

To Baltimore, Philadelphia, New York, Washington, New Orleans, and Hampton Roads.

5. How much asphalt has been shipped to the United States from January 1, 1882, to December 1, 1882?

Twelve thousand nine hundred and sixty tons.

6. How much has been shipped to Europe during the same time?

Fourteen thousand six hundred and twelve tons.

7. In what quantities has asphalt been shipped to the respective ports in the United States during the eleven months above mentioned, and to whom consigned?

	Tons.	Consignees.
To Baltimore	425	Messrs. Thos. Watson & Sons.
To Philadelphia	4,490	Do.
To New York	3,830	Do.
To Washington	2,945	A. L. Barber & Co.
To New Orleans	500	
To Hampton Roads	770	Messrs. Thos. Watson & Sons.
	12,960	

JOHN TOWLER,
Consul.

UNITED STATES CONSULATE,
Port-of-Spain, Trinidad, December 3, 1882.

MEXICAN ASPHALTUM.

REPORT BY CONSUL-GENERAL STROTHER, IN RESPONSE TO A CIRCULAR FROM THE DEPARTMENT.

A variety of bituminous substances, from the pure hard asphaltum to the fluid naphtha and petroleum, are known to exist in immense quantities along the coast of the Gulf of Mexico, chiefly in the States of Tamaulipas, Vera Cruz, and Tabasco, but up to date I have not been informed that there has ever been any organized effort to utilize these deposits either for domestic purposes or for commerce, although, by individual enterprise, small and irregular shipments have been made from the ports of Tampico, in Tamaulipas, and Frontera, in Tabasco.

Consul A. J. Cassard, of Tampico, says that almost inexhaustible beds of asphaltum exist on both banks of the river Thamesi, about 60 miles above that port, being found in a comparatively pure state, and containing only an insignificant percentage of foreign matter, mostly vegetable, which it gathers while oozing through the sedgy borders of the river. It may be gathered with little difficulty, but as the locality is only accessible to boats of light draught, the transportation is the principal hindrance to its exploitation on a large scale. In exporting

the article considerable expense may be avoided by transferring it directly from the boats in which it is originally loaded to vessels not drawing more than 7½ feet of water, which can safely pass the Tampico bar. In this way asphaltum may be exported here at a cost of from $8 to $10 a ton of 2,000 pounds. Clearance fees on such shipments are $5, and commission 2½ per cent. These expenses are on shipments in bulk. Packing increases its cost very heavily. Mr. G. Claussen is the only regular exporter of asphaltum in Tampico.

Asphaltum, or "chapopote," as it is popularly called in Mexico, is frequently found floating in masses on the rivers and lagoons and is cast up on the beach by the waves all along the Gulf coast, especially in the vicinity of Tuxpan and about the Grijalva River in Tabasco, which masses, by the local law of "flotsam," are the property of the finder, and are sold at the rate of from 50 cents to 62½ cents per arroba, 25 pounds. Small lots are occasionally shipped from Frontera to New York and elsewhere. I do not hear of any regular exporters of the article here or elsewhere, except in Tampico, as before stated, although recently published Mexican consular reports show that small quantities of "chapopote," hard, clean, and brilliant in quality, are sold in the Hamburg market at from $3.60 to $3.80 per hundred-weight.

In the State of Vera Cruz this substance is found in greater or less abundance in the following localities:

Canton of Jalacingo.—On the lands of Señor Camilo Vega, in the municipality of Tlapacoyan.

Canton of Minatitlan.—In many different localities, most notably in a place called Chapopote, near Tonalapa.

Canton of Ozuluama.—Several deposits of petroleum, asphaltum, and stone-coal are known to exist in a place called El Chapopotito, in the municipality of Panuco; also at Chapopote, in the same municipality.

Canton of Papantla.—There is a deposit of asphaltum at Tupani, in the municipality of Papantla; others are found on the lands of the hacienda of San Pedro, opposite the junction of the Tehuantepec and Apulcos Rivers, from the Armadillo Pass to the Mirada Mountain.

Canton of Tuxpan.—Large deposits exist in the hacienda of Chapopote; also in the creek and mountain of that name.

Canton of Tomtoyuca.—There is a spring of asphaltum in the hill of Tamelul, in the municipality of Tempoal.

In brief, the whole coast region of the State of Vera Cruz is rich in asphaltum and kindred bituminous substances, such as naphtha, petroleum, and stone-coal.

In the State of Vera Cruz, near the village of Moloacan, a few leagues distant from the navigable river of Coatzacoalcos, there is an immense deposit of asphaltum, which in some points is found pure, and in others more or less mingled with rock-salt and saltpeter. It was visited in 1844 by a learned German traveler, Dr. Hechler, who thus describes it:

The deposit to which I refer is not more than a league in a direct line from Moloacan, although by the winding road the distance is over three leagues. The "salt mine," as it is popularly called here, is an isolated spur branching off from the main ridge or cordillera. This mountain is from 1,000 to 1,200 feet in height, and with a base of from 3½ to 4 miles in extent, shaped conically, and cracked by earthquakes; on its slopes are found a number of pits, some cold and still, others seething and bubbling with noise and a stifling odor. These pits would appear to have cavernous connection with the internal fires of the mountain, which, as indicated by the external heat and frequent subterranean noises, doubtless contains vast masses of material in a state of combustion. The whole adjacent surface consists of asphaltum partly solid and partly liquid, and more or less mixed with rock-salt. So extensive are these beds

that the supply may be considered inexhaustible. In some places the seething pits still continue to eject masses of asphaltum in a liquid state. The Indians call it Chapopote. It may be that this mountain will one day sink and its site be occupied by a lake of asphaltum, like the historic Dead Sea of the Holy Land.

I have also authentic information of extensive beds of asphaltum in the State of Chiapas, on the upper waters of the Grijalva River, which has its course through the State of Tabasco, and empties into the Mexican Gulf, near Frontera. As far as I can ascertain, neither asphaltum nor any of its kindred substances are found in any of the central and mountainous States of the republic, nor in any of those bordering on the Pacific Ocean, and where there has been a special demand for such material on the western coast it has been imported from San Francisco. The foregoing information has been derived from correspondence with our consular officers, from conversation with individuals, and principally from the records of the Mexican Society of Geography and Statistics in this city. While it is for the most part rather general and meager in details, it may be considered as sufficiently authentic and satisfactory in regard to the exisetnce of extensive deposits of the material in question in the localities indicated.

DAVID H. STROTHER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Mexico, January 1, 1883.

AMERICAN GOODS IN SWITZERLAND.

REPORT BY CONSUL MASON, OF BASLE.

In July last a report was submitted to the Department from this consulate, in which it was stated that many articles of everyday use in this country, as stoves, weighing scales, axes, and various agricultural implements, are so primitive and inferior to those manufactured and used in the United States that it would seem probable that such implements and fixtures of American manufacture, if properly introduced in Switzerland, would meet with a ready and ultimately profitable sale. The suggestion was therein made that American manufacturers and exporters of the goods designated should combine to establish joint agencies or depots in Switzerland for the exhibition and introduction of their wares, and for stimulating a demand for them by judicious advertising and the other methods which are usually employed to develop and maintain a successful jobbing and retail traffic.

The report, with its suggestions, has been reprinted by various trade journals from the August number of consular reports, and thence translated into the Swiss newspapers, accompanied by elaborate comments and uniform approval.

Swiss people who have lived in the United States have written to the newspapers confirming the consular report as to the superiority of American implements and household fixtures over those in use here, and have avowed the opinion that if the improved plows, axes, stoves, &c., were once introduced in Switzerland, the old and awkward ones, which are now sold and used, would be gradually abandoned.

A recent emigrant from Canton Soleure to Wisconsin wrote, not long since, to an emigration journal published in this country, to warn Swiss emigrants against encumbering themselves with axes, &c., when

removing to the United States. "If you could watch for five minutes," he writes, "a native woodman go through a log with his long, thin, keen American ax, you would put away your thick straight-handled hatchet and never use it again."

Similar testimony has been offered and widely published concerning stoves, particularly for cooking, and, now that the matter has been suggested, surprise is expressed that modern improved cooking stoves adapted to the use of an ordinary family kitchen have not long ago been introduced.

The result of all this discussion has been to awaken a practical interest in these questions and direct an amount of correspondence to this consulate which would seem to justify a further allusion to the subject.

Established firms, of high reputation in various towns and cantons, have communicated to this consulate, verbally or by letter, their readiness to become the agents of American exporters who wish to introduce their goods in Switzerland, and some of them will even undertake the experiment on their own account by giving definite orders for such articles as may seem promising when brought to their notice.

In the majority of cases, however, the American manufacturer or exporter, who is the party chiefly interested, will naturally be expected to take the initiative and assume a part of whatever financial risk the enterprise may involve. What this report is intended to convey is the assurance that the proposed introduction into Switzerland of judiciously chosen goods of American manufacture is regarded here as entirely possible, and that there will be found no want of capable, experienced, and responsible firms ready to receive such goods on consignment or by purchase, and push the trade with all due enterprise and spirit.

A SPECIAL OPPORTUNITY.

It would seem, moreover, that the present year offers an unusual opportunity for an intelligent effort in this direction.

In the month of April the National Swiss Industrial Exposition will be opened at Zurich and will continue until October. The scope of the exhibition proper is limited to articles of Swiss manufacture, and within this limit it will be by far the most complete and interesting display that has ever been presented in this country.

The country being small, and Zurich centrally located and easy of access, it is reasonably expected that the exhibition will be visited by a very large proportion of the more intelligent and well-to-do people of Switzerland, so that it will afford a rare opportunity for the display of any merchandise which is adapted to meet a popular want.

While American manufactures cannot be admitted as exhibits in the exposition, they can be easily and effectively displayed in public salesrooms or bazaars in streets adjacent to the exposition buildings.

An additional advantage in this mode of exhibition would be realized in the fact that the goods could be offered for immediate sale.

Business men of all classes from every part of the country will be in attendance, and the opportunity which will thus be offered to secure competent agents will be as favorable as could be desired.

There are, every year, other local and cantonal fairs throughout the country during the autumn at which well-chosen goods can be advantageously exhibited.

SOME GENERAL SUGGESTIONS.

One of the first discoveries which an observing American is likely to make when looking into the progress of American traffic in Europe is that our manufacturers and exporters of miscellaneous merchandise have not yet learned the important lesson which has been so long and well understood by their English rivals of adapting their goods and methods of business to the notions and usages of the foreigners whose patronage they seek to cultivate. No matter what the foreign consumer may want, the British manufacturer will make it. He establishes his agent in the distant market and instructs him to ascertain and report precisely how the native merchant prefers to have his imports made, packed, and labeled.

The British cotton manufacturers have held an important trade in Asia against the competition of far better goods from America simply by making the length of each piece what the Mongolian purchasers want and stamping on the outside a rampant dragon, which seems to the Asiatic a courteous deference to his religious faith.

Every market has its own peculiarities and necessities, and if American manufacturers and exporters hope to develop their foreign trade to any substantial competition with that of England and other European countries, they cannot study too zealously or comply too carefully with these requirements. Especially is this true in respect to packing, labeling, and methods of shipment and remittance.

Among other points it is essential—

1. That the lowest and most lenient terms should be granted upon trial orders.

2. The goods should be of the best quality, packed with the utmost care, labeled in the language of the country to which they are sent, and shipped directly, and at the least possible expense, to the central and most accessible points of distribution.

3. Care should be taken to select responsible, enterprising, and trustworthy agents, and this being done, full time should be allowed for the receipt and examination of the goods before demanding remittances. All the processes of business are much more slow and deliberate in Europe than in the United States, and the Swiss merchant who sends a timid experimental order to an American shipper, is often dismayed by the arrival of the exporter's draft before the receipt of the goods.

Contracts for the expenses of shipment should be carefully made and looked after, and the foreign purchaser protected by every precaution against overcharges, which may consume his profit on the entire invoice.

Above all, the wants of the foreign purchasers should be carefully studied.

There are thousands of Swiss in the United States, young men of intelligence and business ability, who understand all this as thoroughly as they know the dialects of their native country. These are the men who should be employed to come here to exhibit goods, establish agencies, and secure orders. They can operate successfully where the cleverest native American, knowing only the English language and home methods of business, would inevitably fail.

Switzerland exported to the United States last year silks, watches, music-boxes, aniline colors, cheese, embroideries, and straw goods, valued in round numbers at 100,000,000 francs.

Statistics of Swiss imports from the United States during the same period are not yet accessible, but they will probably show the whole

amount of such imports to be less than 15,000,000 francs. This enormous disparity is not creditable to our exporters, who have at their command many articles of food and every-day utility, which the Swiss people not only need, but would prefer to similar goods supplied by any other country.

There are probably more people of Swiss birth and parentage now living in the United States than there are in all other foreign countries combined.

The commercial and political relations between the two republics are exceptionally cordial and friendly.

It is but simple justice that the exporters of the United States should contribute a fair share of the food and manufactured products which are imported and consumed by Switzerland, and this they can do if they will adopt the most effective methods and make the requisite effort.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, January 9, 1883.

EXHIBITION HALL FOR AMERICAN GOODS.

REPORT BY CONSUL JACKSON, OF ANTIGUA.

I beg to inform American manufacturers and dealers that, with the consent and approbation of the Department of State at Washington and the Government of Antigua, I have established a hall in connection with the consulate here for the express purpose of exhibiting duty free samples of such articles as may find a market if prominently brought before the public of this island.

In order that an exhibition of samples might be attended with as little expense as possible to manufacturers and others, the government here was requested to pass a law to authorize the exhibition of samples duty free. The request was cheerfully complied with, and I herewith inclose a copy of the act. In connection with this, also, I inclose some extracts of newspapers published here, showing the rapid increase made in trade between the United States and this port, together with mention of the consular exhibition room.

Having had some few years' experience in the tastes and wants of this community, I do not hesitate to say that there are many articles now manufactured in the United States, and many that can be manufactured, which may, with time and attention, be firmly established in this and neighboring markets, if only we put the goods before the people and keep them before the people.

I trust this can be done through exhibition of samples and further advertisement of the same in some leading newspaper of this island, where articles of exhibition will be advertised in a column under the express care and supervision of this consulate. This paper, having a circulation in British ports from Jamaica to Demerara, will advertise largely.

The cost of such a column will be moderate, and will be cheerfully maintained by me in the event of manufacturers and others not consenting to divide the expenses of such advertisement.

A start will not be taken in this direction until a sufficient quantity of samples are on exhibition to warrant such an undertaking.

Having taken out the license under the provision of the act before mentioned, the exhibition room is now open, and I undertake the full care of all samples forwarded for exhibition, subject to the following rules, viz:

1st. Goods will not be received as samples for exhibition before permission is granted to the shipper for space in the hall, and full directions for shipping given.

2d. All freights and foreign charges on samples intended for exhibition must be prepaid, or such goods will not be received.

3d. This office will not be held responsible to owners or authorized agents of owners in any case of loss, damage, or seizure of goods as samples.

4th. More than one article of a particular kind or brand will not be received for exhibition.

5th. A charge for porterage of samples—a small item in any case—will be paid from this consulate, and collection made from owners or their agents.

6th. Samples of goods will be exhibited free of charge to owners for unpacking, displaying, distribution of catalogues and price lists, rent, or any service of mine relating to the introduction of goods whatever.

7th. The final disposition of samples will be subject to the order of the owner or authorized agent of owner of such goods.

8th. All parties in correspondence with this office relating to exhibition of samples requiring a reply, must inclose the sum of eight cents in stamps to cover postage.

In conclusion, I beg to assure American parties interested in introducing their wares in this market that I will do all in my power to protect such goods if placed on exhibition, and to bring them to the immediate notice of all parties liable to import the same.

CHESTER E. JACKSON,
Consul.

UNITED STATES CONSULATE,
Antigua, February 1, 1883.

TRADE BETWEEN ANTIGUA AND THE UNITED STATES.

[From the Antigua Observer of January 8, 1883.]

A little more than two years ago, when writing in this journal on the remarkable expansion of our trade with the United States, we ventured to predict that circumstances then in operation would shortly effect a still further development of that trade, and that while the great bulk of our imports would continue to come from the States, more and more of our produce would find its way thither. The close of the present year and an examination of statistics in connection with our imports and exports show that we have been proceeding, not gradually, but by "leaps and bounds" in the direction of strengthening our commercial relations with the great republic, a fact which we are glad to find the United States Government have not been slow to recognize by advancing the consular position of this port to the same rank as that of the important colonies of Barbadoes and Martinique. The revolution in the direction of the commerce of the island has indeed progressed with rapid strides since the commencement of the decade ending with the last year. At that period most of the owners of our sugar plantations were heavily indebted to British capitalists, to whom they were in consequence compelled to consign their produce, whatever inducements other markets might offer. In 1872 the value of our shipments to the United States barely amounted in round numbers to $11,095, while at the expiration of the last year's season we had sent to our American cousins sugar and molasses, the shipping value of which was officially declared to be $743,717! In the three first years of the last ten we could only sell to the United States the aggregate value of $40,703;

in the last three years of the same period we were able to let them have from us $1,977,817! The difference of these figures means that Antigua has by so much become emancipated from the domination of the mortgagee and taken a fresh start on the road to prosperity. Our business transactions with America have indeed been eminently satisfactory, since having received on the spot much higher prices for our produce than it could have netted in the beet-ridden markets of the United Kingdom, we have with the change of customers been able to bid defiance to what must otherwise have proved a ruinous competition with bounty-fed sugar. At present nearly two-thirds of our principal staple product goes to the States, and as the demand for sugar there is largely increasing with the ever-flowing stream of emigration from other countries, in the nature of things the West Indies will always find eager customers in the people of the neighboring continent.

Trade, at least between civilized countries, cannot prosperously be maintained without some considerable degree of reciprocity; and in return for the liberal custom accorded us by the United States during the last few years, we have purchased from them in increasing quantities such goods as they have had to sell to us. Almost all of our imported food stuffs now come from the States, the single exception perhaps being fish, which mainly comes from the British provinces; and we are large consumers of building materials, the greater part of which is brought to us from the neighboring Republic. This import trade has nearly doubled within the last decade, in proof of which we will give just a few of the more important articles imported in 1872 and 1881 respectively. In 187', of bread and biscuits we took from the States 218,082 lbs.; in 1881 of the like articles we received from them 379,436 lbs.; in the former year they sent us 110,000 lbs. of pork, against 720,800 lbs. in 1881; 4,629 lbs. of butter came in 1872; in 1881 we took no less than 33,836; of flour in 1872 we got 11,238 bbls., against 17,557 bbls. in 1881. Pitch pine and other "lumber" which came in the former year amounted to 403,900 ft. against 609,754 ft. in 1881; and so we might go on enumerating a long list of articles, the import of every one of which from the United States has largely increased since they became regular purchasers of our produce. Many articles produced in the States have not yet found a brisk market with us, because they are practically unknown here. Cotton manufactures and agricultural implements, although having no doubt considerable merit, being among the number. In order that such articles may prominently be brought before the notice of our public, Mr. Chester E. Jackson, the energetic American consul at this port, has, with characteristic patriotism, induced our government and legislature to pass an act sanctioning the importation of samples of goods free of duty, which will be exhibited at a proper hall to be provided by the consul for that purpose. The importance of this step to the trade between the two countries can hardly be overestimated, and we only hope that manufacturers and others in America will further the enterprise by freely sending specimens of their merchandise to the new exhibition hall.

[From the Antigua Times of November 1, 1882.]

The legislative council considered and passed an act that will be of interest to our American friends. It is "An act to authorize the importation free of duty of articles intended for exhibition" (as samples). The object is to bring before the public notice articles that would never be known of otherwise, or, if so, only by a meager advertisement, and therefore could not demand that appreciation of the modern improvements so rapidly made in the States. The idea of such a bill originated with Chester Jackson, esq., the United States consul here, who has during the time he has been accredited to this government been energetically introducing American implements of agriculture, &c. Mr. Jackson has afforded a double benefit by promoting the introduction of the bill. We have reason to believe that at the consulate here a hall will be set apart for the exhibition of American novelties of agricultural, commercial, household, and general utility. American patentees will do well to avail themselves of this means of introducing their inventions.

SAMPLES IMPORTATION.

AN ACT to authorize the importation free of duty of articles intended for exhibition.

1. Goods for exhibition may be imported duty free.
2. Declaration of importer.
3. Goods to be kept in licensed exhibition halls.
4. Goods not taken to licensed hall or removed without permission to be forfeited.

5. Halls to be licensed; bond to be taken.
6. Treasurer may enter hall and take account.
7. Goods not to be sold without permission.
8. Conviction of holder to forfeit license goods, how to be dealt with.
9. *Onus probandi* on defendant.
10. Penalty clause.
11. Application of penalties.

Whereas it is expedient to encourage the importation of goods, wares, and merchandize into this presidency—

Be it enacted by the governor and legislative council of Antigua as follows:

1. All samples of manufactured and other goods, or of any other article whatsoever intended for exhibition only, and not for sale, may be imported into the presidency free of duty, anything in the tariff act to the contrary notwithstanding: *Provided*, That not more than one sample of any particular kind shall be imported by any one person free of duty under this section; *Provided also*, That no article identical with one already imported for exhibition shall be free of duty under this section.

2. At the time of the entry inwards of any such or other articles the importer shall make in writing upon his warrant the following declaration: "I, A. B., do solemnly declare that the several articles specified in this warrant are intended for exhibition only, and not for sale."

3. Such goods immediately on their importation shall be taken to and deposited in one of the licensed exhibition halls hereinafter created.

4. Any goods passed as goods for exhibition which shall not be at once taken to a licensed exhibition hall, or which shall be removed from such hall without the permission in writing of the treasurer authorizing their removal, shall be forfeited, and may be seized as forfeited by any person authorized under the tariff collection act to make seizures.

5. It shall be lawful for the treasurer by writing under his hand to license fit and proper places as licensed exhibition halls, provided always that no such license shall issue until the occupier of such hall shall have entered into a bond, with two sureties to be approved by the governor, in the sum of two hundred pounds for the due accounting for all articles deposited in such hall.

6. It shall be lawful for the treasurer or any officer of the treasury to enter at any time any licensed exhibition hall and to take account of the goods therein.

7. It shall not be lawful to sell any articles imported for exhibition except with the permission in writing of the treasurer, and after payment of the duties which would have been paid on the importation of such articles had this act not been passed: *Provided always*, That the permission of the treasurer, except in the case of perishable goods, shall not be given until the expiration of three months after the importation.

8. Whenever the holder of any license granted under this act shall be convicted of any offense against this act or the tariff collection act, it shall be lawful for the treasurer, with the approval of the governor, to cancel such license, and take possession of all articles contained in such exhibition hall, and remove them to the government warehouse, and to detain them there until the duties which, but for the passing of this act, would have been payable on their importation, be paid, together with the cost of securing them and conveying them to such warehouse, and the usual warehouse rent for such time as they may remain in such warehouse. And if such charges are not paid within three months, he may sell them by auction in the same manner as goods for which entry has not been made.

9. In all cases brought by the treasurer against any person under this act the *onus probandi* shall be on the defendant.

10. Any person who shall do anything by this act forbidden, or shall omit to do anything by this act required, or shall make any false declaration, or shall remove or permit the removal of any goods without permission, or shall molest, resist, or obstruct the treasurer or any person acting under his authority, or shall be concerned in or a party to the commission of any such offense, shall on conviction thereof before any district magistrate, forfeit and pay such sum, not exceeding one hundred pounds, as to such magistrate shall seem fit, and in default of payment of such fine shall be imprisoned for any term not exceeding six months.

11. All fines imposed and the proceeds of the sale of all goods seized under this act shall be paid into the public treasury.

THOS. D. FOOTE, *President.*

Passed the legislative council the 16th November, 1882.

EDWARD BAYNES, *Clerk.*

Dated at Antigua, the twentieth day of December, 1882, in the forty-sixth year of Her Majesty's reign.

Duly published at Antigua the 22d December, 1882.

O. HUMPHRYS,
Provost-Marshal.

I assent.

JOHN HAWLEY GLOVER.

AMERICAN TRADE IN GUERRERO.

REPORT BY VICE-CONSUL WINSLOW.

EXPORTS TO THE UNITED STATES.

Statement showing the value of declared exports from the consulate district of Guerrero to the United States, for the quarter ending December 31, 1882.

	Value in United States gold.
Beef hides, goat, kid, and deer skins	$4,856 00
Cattle	338 00
Total	5,194 00

The small amount of exportations for this quarter, amounting to only $5,194, is owing to the fact that during the months of October and November there existed a strict quarantine against this place on account of the yellow fever then raging in Mier, only 30 miles distant, but which did not reach this place.

YELLOW FEVER.

The number of deaths from yellow fever in Mier during the epidemic amounted to 378—a large number for so small a place. The fever originated from a cargo of goods brought from Matamoros. In Camargo, 20 miles lower down the river, there were only a few cases; and after the fever had subsided in Mier, and in the neighboring towns, there were none at all. The fever took the town of Mier by surprise, as it is situated 120 miles from Matamoros, and had never occurred there before, and no cases had occurred at Camargo, Rio Grande City, or Reynosa, lower down the river.

IMPORTS FROM THE UNITED STATES.

I have not been able to obtain the exact amount of the importations for the last year, as the custom-house was not opened until the 16th of January, 1882, and the fiscal year is not yet completed, but the custom-house collector informs me that they will not fall short of $425,000 from all sources. The importations from Matamoros of European goods amount to about $20,000; from the interior of Mexico there have entered about another $20,000 worth of Mexican goods, so that there remains $385,000 worth of goods that were imported from the United States.

The principal articles imported from the United States are the following:

Ammunition and fire-arms.

Axes, hatchets, hoes, spades, shovels, bolts, hinges for doors, screws, nails, tacks, chains, all sorts of iron kitchen utensils, artisans' tools, smoothing irons, cutlery, and pig iron.

Cotton and woolen goods of all sorts, and ready-made clothing.

Beer, blacking, boots and shoes, brushes, brooms, buckets, stearine candles, coffee, confections, canned fruits, and vegetables.

Crackers, crockery and glassware, wheat flour, ready-made furniture,

window glass, ax handles, hats, lamps and lanterns, lard, lead, spirituous liquors, matches, mirrors, leather, coal oil, paints and paint brushes, writing and wrapping paper, pens and penholders, pencils, pins, rice, salt, starch, white refined sugar, tobacco, tin, trunks, lampwicks, vermicelli and groceries of all sorts, sewing-machines, cheap fancy jewelry, and largé quantities of boards and lumber. All the above articles are in constant demand, and can be sold at a profit. There is a municipal import duty of 1.37 per cent. on all imported goods, and besides a duty of one-half per cent. on those goods that are nót on the free list. Besides, the charges of the custom-house brokers for making out the papers and the permission, amount to at least 5 per cent. more.

All sorts of woolen, linen, and silk goods, by the piece or made into clothing, jewelry and articles of luxury for adornment of the person, or for houses, come from Europe, through Matamoros, and cost less than similar articles do in the United States. From the interior of Mexico come all sorts of saddlery ware, such as saddles, bridles, stirrups, saddle-cloths, goat and deer skin jacket and pantaloons, ropes, lariats, nose bags, and ystle (the fiber of the lechuguilla), used for making ropes and bags; corn, beans, brown sugar in one-pound loaves, white crystallized sugar in loaves of twenty-five pounds each, aguardiente, mescal, earthenware dishes, generally used in cooking; Mexican hats, shoes, rebozas (a long narrow shawl made of silk or cotton, worn by women), blankets, cassimeres, tanned goat and deer skins, tanned hides, leather, metates for grinding corn, rice, chocolate, red pepper, peines, salt, some spices and medicinal herbs, and other articles too numerous to mention.

Not a single pound of wool has been exported to the United States from this place during the last year, on account of the high import duty there, and hardly any from the other towns on the frontier. This was formerly one of the principal articles of export. The wool has been taken to the woolen factories in the interior, to be used there in the manufacture of cassimeres, hats, yarn, blankets, and rebozas. The Mexicans make a very good quality of cassimeres; are better than those made in the United States, and sell for a less price, and compare favorably with those that come from Europe. They also make a very good quality of boots and shoes, and domestic cotton goods, so much of which are used here.

EUROPEAN VS. AMERICAN GOODS.

The Zona Libre has been a vexed question, but the merchants of the United States can hardly complain of it, as they have here one of the best markets for their goods, and if they made a better quality and sold at a more reasonable rate, they could easily compete with those from Europe. They both stand on an equal footing, neither pay the customary duties, and the United States have the advantage that they are nearer to Mexico than Europe is. It seems strange that European goods can be brought across the ocean, pay heavy freights, import dues, custom-house documents, freight from Matamoros here, a distance of 150 miles, on carts, and be sold at a more reasonable rate than the same goods made in the United States, and brought by railroad to Laredo. I speak here principally of woolen goods.

Mexican dollars are worth here and in Laredo only 87½ cents, United States money, and exchange on New York and New Orleans can be obtained at three to four per cent. with difficulty. All these things, the custom-house papers, municipal dues, freight, and difference in exchange,

combine to make the price of goods high by the time they are laid down here.

A considerable quantity of goods are taken from here into the interior of Mexico, but I think there is very little, if any, contraband trade. It would be too risky.

MARKET PRICES.

The following are some of the leading articles of consumption, both native and imported:

Beef	per pound..	$0 04
Lard	do....	25
Pork	do....	06
Kids	each..	50
Chickens	do....	12
Hens	do....	50
Milk	per quart..	12
Eggs	per dozen..	37
Salt	per pound..	06
Stearine candles	each..	03
Sugar:		
Brown Mexican	per pound..	06
White Mexican	do....	25
White American	do....	18
Coffee	do....	25
Beans	per peck..	1 00
Flour	per pound..	12
Rice	do....	12
Petroleum	per can..	2 50
Alcohol	per gallon..	1 50
Canned fruits	per half can..	25
Starch	per pound..	12
Tobacco	do....	25
Cotton shirting	per yard..	12
Calicoes	do....	12
French cassimeres	per cut..	6 00
United States	do....	4 00
Mexican	do....	3 00
Soap	per pound..	25

Tariff for the city of Guerrero, for articles exported, which go to make up the municipal fund.

1.	For every kind of animal killed for purpose of speculation	$0 25
2.	For every head of horses, mules, or cattle taken out of the country	1 00
3.	For every head of horses, mules, or cattle taken into the interior	12½
4.	For every fat pork which is taken out of town or which is killed in town for purpose of speculating	06¼
5.	For every beef-hide taken out of town	03¼
6.	For every thousand head of sheep or goats taken out of the country	12 00
7.	For every thousand head of sheep or goats taken outside of the limits of the town	1 00
8.	For every horse, mule, or jackass taken out of the limits of the town	25
9.	The mares and she asses taken out of the country, for each	2 00
10.	Each mare and she ass taken out of the municipality to any other part of the republic will pay	25
11.	Every arroba (25 pounds) of wool raised within the jurisdiction of the town, will pay for its extraction to any part of the republic, or outside of its limits	01¼
12.	Each skin of sheep or goats, for its extraction to other ports, will pay	01¼
13.	Each cart which enters town for speculative purposes will pay what is called "el piso"	12½
14.	Every hundred of sugar-cane, to enter	12½
15.	Every hundred dollars' worth of earthenware of the country will pay one per cent. to enter	1 00
16.	Every hundred dollars' worth of foreign earthenware will pay one and a half per cent. to enter the town	1 50
17.	Every hundred oranges that are sold	12½

18. All sorts of wood, worked, of this or other countries, to enter, will pay for each foot	$0 01
19. Each thousand of garlic or onions will pay	1 00
20. Each gallon of alcoholic liquor, to enter	06¼
21. Each gallon of other wines or vinegar, to enter	01¼
22. Every package of dry merchandise, to enter	12½
23. All sorts of grain, with the exception of corn, will pay to enter, on each arroba	02
24. Every billiard table will pay monthly	2 00

25. All other establishments of whatever kind will pay, according to the pleasure of the town authorities, a monthly tax, according to the amount of their capital.

All articles which are not contained in the present tariff remain subject to the pleasure of the authorities of the city of Guerrero to levy upon them a contribution which they think just and right.

CHARLES WINSLOW,
Vice-Consul.

UNITED STATES CONSULATE,
Guerrero, Mexico, January 12, 1883.

AMERICAN TRADE AT KEHL.

REPORT BY CONSUL BALLOU.

AMERICAN TRADE.

It is impossible to ascertain the exact extent of American exportation to this district, removed as it is from the seaports where the goods are landed and registered, and owing to the fact that there are few, if any, direct importations. It can be safely stated, however, that cotton, petroleum, and canned goods, meats, &c., are the principal articles.

About 100,000 bales of American cotton are annually consumed in Alsace; the amount is regulated by the demand for the different qualities of cotton goods; for the very fine grades nothing but Egyptian cotton is used. Last year the entire importation of raw cotton into this district was 34,737,000 pounds, three-fourths of this being from the United States, the other fourth principally from Egypt and India, and a small amount from Brazil. American petroleum is gradually coming into favor; the aversion to its use which for a long time, especially in Alsace, was detrimental to its sale, is rapidly dying away. An evidence of this may be found in the fact that 84,000 gallons more of petroleum were imported into Alsace alone last year than were imported the preceding year. It is also more and more used in Baden and Lorraine, but I have been unable to procure reliable figures in regard to this section.

Canned goods—meats—were at one time extensively imported here and had a large sale, which increased rapidly up to the time of the unjust attacks of the press upon "American canned meats." I am informed that the dealers in this article were accused of using inferior and oftentimes deteriorated meat; these statements, together with the fact that the people of this district have a prejudice against all American products, could have but one result, and although dealers here acknowledge that the meats are excellent and there is no just cause for complaint, the sale has, for reasons stated above, largely decreased.

The sale of canned fruits has not increased of late. American dealers in these goods have to contend against the peculiarly fine style in which French goods of this class are put up, together with the natural predilec-

tion of the people of this section for goods of home production. There is one exception, however: evaporated apples could find a ready sale here; dealers would do well to present this fruit for this year's trade, as the fruit crop here has been a total failure, heavy and frequent rains having damaged it irreparably. One firm informed me that they could already have disposed of quantities of this fruit had they known just where to procure it. I have been consulted several times in regard to "American evaporated apples," and am convinced that dealers could increase their sales largely by giving some attention to the matter.

American hardware (such as hoes, spades, hay-forks, scythes, &c.) has been introduced here, and has given good satisfaction, as in style and finish the goods are vastly superior to those of the same kind manufactured here; their sale might be very materially increased, however. American manufacturers who have introduced these goods into this section should bear in mind that their trade abroad depends upon nearly the same efforts which are required to maintain it at home, and as soon as they realize the importance of giving more special attention to their trade in foreign countries, this trade will proportionately increase.

My short residence here precludes the possibility of my giving a more detailed statement in regard to the articles imported into this district, as the facilities for attaining facts and figures relative to these matters are decidedly poor. I offer, however, the following in regard to articles of special importance brought into Alsace during the last year:

Cotton (raw), America, India, and Egypt	pounds..	34,473,702
Cotton yarns, Switzerland and England	do....	739,506
Cotton goods, Switzerland and England	do....	122,722
Iron ore, England and Belgium	do....	4,525,802
Hops, United States	do....	11,166
Brandies, France	gallons..	16,328
Wine in casks, France and Italy	do....	769,993
Champagne	do....	1,612
Coffee, Brazil	pounds..	460,948
Rice, Italy	do....	339,654
Salt, Austria	do....	37,500
Tobacco, Cuba, France, and Switzerland	do....	21,924
Refined sugar, France and Belgium	do....	192,544
Petroleum, United States	gallons..	323,680
Coal, England and Belgium	pounds..	83,975,302
Woolen goods, France and Switzerland	do....	112,190

FRANK W. BALLOU,
Consul.

UNITED STATES CONSULATE,
Kehl, November 21, 1882.

CIGAR TRADE OF CUBA WITH THE UNITED STATES.

REPORT BY CONSUL-GENERAL BADEAU.

In conformity with the instructions conveyed in Department dispatch of October 24, 1882, I have the honor to submit a report of the amount of the cigar trade of Cuba with the United States. The various consular officers outside Havana report that there is no cigar trade in their districts of the slightest importance, and with the exception of the districts of Santiago de Cuba and Cardenas, absolutely none. The entire trade in this article is concentrated at Havana, which is not only the principal seaport of the colony, but is situated in the heart of the

tobacco-growing country, and is the only seat of manufacture of cigars on the island.

The return of cigars from Havana, therefore, is a return of the cigar trade of Cuba.

ADAM BADEAU,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Havana, February 10, 1883.

Statement of the declared value of cigars, in Spanish gold coin, "pesos," shipped from the port of Havana, island of Cuba, to ports in the United States, during the year ended September 30, 1882.

Ports and destinations.	Quarter ending—				Totals.
	December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	
Boston	$49,071 97	$45,547 13	$7,160 97	$42,823 54	$144,603 61
Baltimore	14,086 90	7,155 29	1,157 88	3,780 70	26,180 77
Buffalo	1,933 62	1,944 12	.....	1,469 07	5,346 81
Chicago	48,060 24	49,709 63	10,352 89	65,998 72	174,121 48
Cincinnati	4,429 63	4,173 12	976 39	4,412 67	13,991 81
Charleston	712 34	1,599 63	.....	740 65	3,052 62
Detroit	19,012 67	384 78	.....	.....	19,397 45
Galveston	.....	.....	338 50	.....	338 50
Key West	435 62	4,733 97	.....	.....	5,169 59
Louisville	2,033 88	2,306 01	.....	1,168 07	5,507 96
Minneapolis	.....	.....	.....	150 61	150 61
Milwaukee	4,041 03	6,920 58	.....	1,919 02	12,880 63
Mobile	412 68	.....	.....	.....	412 68
New Orleans	87,684 52	36,178 79	15,596 29	6,329 19	95,788 79
New York	541,025 88	546,749 90	791,282 72	508,590 49	2,387,648 99
Omaha	.....	.....	510 16	.....	510 16
Philadelphia	21,087 15	19,682 30	1,126 65	15,792 43	57,688 53
Pittsburgh	6,007 27	3,602 19	733 07	4,980 36	15,322 89
Portland	317 70	.....	.....	.....	317 70
Peoria	.....	.....	.....	803 07	803 07
Rochester	.....	362 06	.....	1,287 88	1,649 94
Savannah	.....	2,555 46	.....	1,672 62	4,228 08
San Francisco	125,714 96	74,780 62	9,617 68	81,643 10	291,756 36
Saint Louis	19,188 95	15,589 79	4,320 92	35,635 42	74,735 08
Washington	.....	.....	125 30	.....	125 30
Totals	895,257 01	823,975 37	843,299 42	779,197 61	3,341,729 41

RECAPITULATION.

First quarter	$895,257 01
Second quarter	823,975 37
Third quarter	843,299 42
Fourth quarter	779,197 61
Total	3,341,729 41

Statement showing the number of cigars exported from the consular district of Santiago de Cuba during the four quarters of the year ended September 30, 1882.

September 28, 1882, two cases cigars, value, $159.12 American gold. Exported from Santiago de Cuba to New York.

Santiago de Cuba, November 18, 1882.

For the consul.

J. VIOSCA,
Acting United States Vice-Consul.

Statement of cigars shipped from the port of Cardenas during the four quarters of the year ended September 30, 1882.

Quarters ending—	Vessels.	Number of cigars.	Port in the United States.	Value in American gold.
1882.				
March 31	Minnie Hunter	2,900	Portland	$324 16
March 31	Gipsey Queen	5,000	Portland	145 98
September 30	G. de Zaldo	7,000	New York	210 00
Total				680 14

JOSEPH H. WASHINGTON,
Vice Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Cardenas, November 3, 1882.

INDIAN vs. AMERICAN WHEAT.

REPORT BY CONSUL-GENERAL MATTSON, OF CALCUTTA.

I have the honor to submit the following report concerning Indian *versus* American wheat.

The annual production of wheat in British India has of late years increased, until it now reaches about 240,000,000 bushels,* and the export for the last five years has been as follows: 1877–'78, 12,175,853 bushels; 1878–'79, 2,170,631 bushels; 1879–'80, 4,312,418 bushels; 1880–'81, 14,012,291 bushels; 1881–'82, 37,135,481 bushels, of which Great Britain and France have taken the following quantities:

Countries.	1877–'78.	1878–'79.	1879–'80.	1880–'81.	1881–'82.
Great Britain.....bushels.	10,698,518	1,597,273	3,037,022	8,964,168	17,507,987
France.....do	217,792	20,556	138,439	2,531,933	9,908,408

Assuming that 28,000,000 bushels are held for seed, there will be left a home supply of 175,000,000 bushels; how much of this is actually consumed and how much stored away in reserve it is impossible to ascertain, but it is well known that the quantity held in reserve is very large, and usually estimated, with other breadstuffs, sufficient for one whole year's consumption, and that it requires from two to three years' accumulated surplus to make up such reserve.

The total area devoted to wheat each year is now a little over 20,000,000 acres, of which 7,000,000 acres are in the province of Punjab, 6,500,000 in the Northwestern Provinces and Oudh, 3,000,000 in the Central, 1,500,000 in Bombay, 1,000,000 in Bengal, and the remainder divided among the provinces of Berar, Sindh, Madras, Ajmere, Mysore, and British Burmah, in the relative order named. The best average yield is obtained in the Punjab, where it is estimated at 13½ bushels per acre,

* There are as yet no complete agricultural statistics for India, and the figures given in this report, except those relating to exports, are based partly upon local returns, but mostly upon official estimates. It is hoped, however, that for the objects in view they will be found quite sufficient. They are given in round numbers for the sake of convenience.

and in the Northwestern Provinces at 11⅔ bushels; the general average is about 12 bushels per acre, though by high cultivation and use of irrigation and manure, instances are not uncommon of a yield as high as 25 and even 30 bushels per acre.

CULTIVATION AND COST.

The latitude has but little influence on the wheat crop in India compared with differences in soil and mode of cultivation. The crop requires a great deal of moisture, hence irrigation is of special importance, and various methods are employed for that purpose; the one destined to become a leading factor in the production of wheat is that of canal irrigation, which is now receiving the special attention of the general and local governments, and important works are being made and projected for an extensive system of canal irrigation. One of these, the Sirhind Canal, in the Punjab, has just been completed; it was built mainly by prison labor; is 502 miles long, and will irrigate 780,000 acres through 2,500 miles of minor channels.

The wheat is sown in the autumn and harvested in March or April; it is usually sown in drills or rows and weeded like garden stuff, and in quantities not much larger than garden patches in the United States; but the agricultural population numbers nearly 200,000,000, and it is the aggregate of innumerable little units which in agriculture, as in everything else in India, brings the country into importance, and this fact is so closely interwoven with the whole social, industrial, and legal network of India that it bears a strong influence even upon the future question of Indian *versus* American wheat.

The Indian agriculturist—ryot—can in no sense be compared to the American farmer, but rather to the late serf of Russia. He is a tenant on hard conditions, and is, by custom and bigotry, almost a fixture on the particular spot of land where he was born; his farming is done on a very small scale and according to old methods, to which he clings with religious veneration; his wants are very few, and he endures poverty and even hunger with patience; he cultivates his patch of 5 to 15 acres on shares for the landed proprietor—zemindar—who holds under rental to the government, and the better half of his gross income generally goes to the zemindar, the priest (Brahmin), and the usurer, in the form of rent, presents, offerings, and interest, and if he can net 10 cents a day by his hard and hopeless labor, that will suffice for the most pressing wants of his household. His home is a mud or bamboo hut; his property a pair of small bullocks, a few cows, calves, and goats, a wooden cart, and a few brass and earthern pots—in all, worth about $50; and his implements and tools are of the rudest kind, such as his ancestors used a thousand years ago; and yet he is making some progress under British rule, and finds his wants increasing and at the same time better outlets for his produce and more recompense for his labor, and, on the whole, is so independent on 10 cents a day that he will eat or store his wheat rather than sell it below a certain price. Of course, he does not employ machinery in farming, but plows his land with a crooked piece of iron-pointed wood, harrows it with an implement resembling a common ladder laid flat on the ground and dragged by the little bullocks crossways over the field; he sows by hand, reaps with a rude sickle, carries the sheaves home on his back or in the bullock cart, threshes them with a wooden club, or lets the cattle tramp out the grain, and cleans it by hand-winnowing.

Under these conditions the ryot can afford to sell his wheat at the

nearest market place, if within a day's journey of his home, for 50 to 60 cents per bushel; but when it does not bring that price, or very near it, he consumes his small supply, or stores it in a hole under ground until a more favorable time shall come, and when it comes he sells very short, and uses millet and inferior grains for his family subsistence, so that a great elasticity in the amount of surplus is constantly kept up by the countless host of the ryots themselves. And this same course will necessarily be pursued, in the main, for a long time to come, because the social and religious condition of the agricultural classes is such that it will take generations to make any material change among them. Then, again, the cutting up of the land into small patches, to suit the rapidly-increasing population and for irrigation purposes, the absence of roads and bridges, the want of strength in draught animals, the poverty of the people, and other reasons, make it impossible to farm on a larger scale and to use machinery;* but even if all these objections were removed, the present cost of labor is too low even for the successful competition of farm machinery; and it may be regarded as certain that the cost of wheat, as now produced, is at or near the very lowest possible minimum, and when it does not bring 50 to 60 cents a bushel to the ryot it will be consumed at home in lieu of other breadstuffs, and the wheat area will be temporarily diminished.

QUALITY.

There are a great many varieties of wheat produced in India and they have become more or less intermixed, though efforts are being made to separate and select the best or those most suitable for the European market.

These have been divided into four principal groups, viz:

1st. The soft white wheat, of a bright straw color and a white floury fracture. This variety is most suitable for the London market, and is in great demand by English millers, on account of its dryness, to mix with the moist English wheat.

2d. The hard white wheat with a brittle grain, of a flinty or ricy appearance. This brings a higher price in Italy, for the manufacture of macaroni, than in London.

3d. The soft red wheat, which differs from the soft white only by the reddish color of the skin and a smaller grain. It is also very suitable for the English market.

4th. The hard red wheat, which is of a dark brown color, translucent in appearance, with a smooth and glass-like fracture. It stands lowest in the London market.

Compared by English standard in quality and value to American wheat, select lots of first group have been found equal to the best Californian and Oregon, but the average best grade is between No. 1 and No. 2 Milwaukee, and the relative values of the four Indian groups are as follows:

Second group, 5 cents per bushel less than first.

Third group, 5 cents per bushel less than second.

Fourth group, 5 cents per bushel less than third.

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*The only exception would be in favor of a light, cheap, hand fanning-mill, and that only because the grain cannot be properly cleaned and separated by present methods for the English market; and here is a good opportunity for some American manufacturer, the English fanning-mills sent here for trial having proved too heavy and expensive.

The standard of all the groups is being gradually raised by more care in separating varieties, more thorough cleaning, and the use of better seed.

TRANSPORTATION.

The facilities for handling and transporting grain are very poor compared to the United States. There are no grain elevators and no facilities for shipping in bulk, but all the grain must be put in bags, handled and carted by manual labor. The cost of ocean freight depends upon the fluctuations of the general steamship carrying trade, and varies so considerably that exporters can make no definite calculation ahead, but are obliged to watch their opportunities from week to week and day to day. Nearly all the wheat exported goes through steamers via Suez Canal, and the time required for the transit to London is, from Calcutta 35 to 40 days, from Bombay 28 to 33 days, and from Kurrachee 30 to 35 days.

While the wheat is exposed to the air during inland transit and storage at the seaport it is liable to serious damage by the weevil, an insect germinating in the grain itself under the influence of heat, but when stored under ground it will keep in good condition for years, and even in a ship's hold it is comparatively safe during the time required for transit.

The money exchange market between London and India is constantly fluctuating, which causes another serious drawback to the export trade. The cost of inland freight, so far as the railroads extend, is fixed by government and not liable to any material fluctuations. Trunk lines are already in operation through all the wheat-producing provinces, and several branch lines have been built while others are being constructed or projected, but, compared to the principal wheat districts in the United States, Indian railroads are few and far between, and the work of construction is very slow. A very important line, the Indus Valley, has lately been completed and brings the Punjab in direct communication with the sea at Kurrachee, which is destined to become an important seaport for the exportation of wheat.

The following table gives the cost of transportation from the principal wheat districts to the sea ports.

From Punjab to Kurrachee, average distance 800 miles, freight per bushel 25 cents.

From Northwestern Provinces and Oudh to Calcutta, average distance 700 miles, freight per bushel 18 cents.

From Central Provinces to Bombay, average distance 460 miles, freight per bushel 16 cents.

From Province to city of Bombay, average distance 150 miles, freight per bushel 8 cents.

To this cost must be added the charges of the middle-men at the inland bazaar, which will average 5 cents per bushel; and the cost of bagging, shipping, and commission to the exporter at the sea-port, 8 cents more; ditto insurance and landing charges in London 5 cents, and ocean freight, which averages from Calcutta to London 30 cents, and from Bombay or Kurrachee 25 cents. Thus it will be seen that the actual cost of Indian standard wheat from the Punjab, Northwestern Provinces, and Oudh, where two-thirds of all the wheat is produced, will average from $1.16 to $1.28 per bushel laid down in London; and while the wheat from other provinces is cheaper on account of the shorter distance to the seaboard, it is also relatively inferior in quality.

About seven-twentieths of the export to Europe goes over Calcutta.

About eleven-twentieths of the export to Europe goes over Bombay.
About two-twentieths of the export to Europe goes over Kurrachee.

UNDEVELOPED WHEAT RESOURCES.

The total area of India under British administration is 904,000 square miles, and that of the native states 575,000 square miles; but the latter area is not dealt with in this report.

The following table gives the area in each of the four principal wheat-producing provinces, with the proportion of cultivated, culturable, and unculturable areas, so far as can be ascertained:

Provinces.	Total area.	Cultivated area.	Culturable area.	Unculturable area.
	Square miles.	*Square miles.*	*Square miles.*	*Square miles.*
Punjab	107,010	36,656	36,706	33,648
Northwestern and Oudh	105,031	51,000	20,139	33,892
Central	84,208	22,840	26,755	34,613
Bombay	73,609	35,053	4,022	34,533

from which appears that in those four provinces alone there are nearly 88,000 square miles or 56,000,000 acres virgin land, the larger portion of which can be made suitable for the cultivation of wheat. It should be remembered, however, that this land is overgrown with jungle, and the process of clearing is very slow and expensive, and that nearly all of it requires irrigation.

In order to facilitate the development of the wheat resources and to assist the export trade, the Government of India is pursuing a policy of encouragement which has already resulted in better facilities of transit to the seaboard by the construction of new railways and in the reduction of freight; it has removed taxes, export and octroi duty; it is diffusing knowledge and instruction in the cultivation of wheat and improvement of the soil, constructing canals for irrigation and transportation, and in many other ways giving moral and material aid to this great cause, in the hope that India may ultimately become the granary of Great Britain.

When all these facts are summarized it will be found—

That India can produce an average quality of wheat at as low cost to the producer as the most favored locality in the United States.

That she can now supply the European market with about 40,000,000 bushels annually, and possesses facilities for increasing the supply to an almost unlimited extent, owing to the great elasticity of the home consumption and to the vast amount of land awaiting cultivation.

That in quality, cheapness of transportation, facilities for handling, safety against damage during transit, and stability of money exchange, the American wheat, especially that from the new Northwest, has such advantages that there need be no serious apprehension on account of Indian competition at legitimate prices, but that in order to maintain this advantage it is absolutely necessary that America should keep pace with India in the efforts to reduce and maintain freights at the lowest possible minimum.

On the other hand, it is an indisputable fact that Indian wheat has

already become, and will continue to be, a very important factor in the grain markets of Europe, and a check against high prices brought about either by speculation or any other unnecessary or artificial means.

And, finally, that upon this basis of a fair average crop throughout the world the American farmer will have to prepare himself to reduce the cost of production to the lowest minimum, and be content with small profits, or else wheat-growing in India will be stimulated to such an extent that subsequent competition may become extremely formidable.

H. MATTSON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Calcutta, December 23, 1882.

GERMAN AND AUSTRIAN ADULTERATION OF AMERICAN PRODUCTS.

REPORT BY CONSUL TANNER, OF LIEGE.

There are no people who cry out more lustily and energetically against adulterations than the Germans and Austrians, and yet there are none who indulge in such practices more extensively. Were the full extent of the talents displayed by these nations in adulterations turned into more honest researches the benefits that would doubtless accrue to them and to science would be hard to define. They can take (and they do it, too) one gallon of our kerosene oil and make one and a half gallons out of it.

If you go into a shop in Germany where this kerosene is peddled you will be surprised to find the oil, which you have already regarded as possessing but one grade, transformed by the Germans into three grades, and gravely told, when you manifest surprise, that it came from America that way.

The first quality will be found slightly dashed, the second considerably so, and the third so heavily as hardly to be detected by its oldest and most intimate acquaintance.

The science of dilution is carried into everything that is liquid, and adulterations into everything that is solid. Their wines, liquors, and beers, their medicines, and even their mineral waters, are full of all kinds of concoctions and foreign ingredients that are dangerous to life and health. Their sausages and hashed meats are a of *mélange* of doubtful ingredients.

Even their woolen goods are adulterated with wool made from rags; the rags are passed through a machine, reconverted into wool, then made into cloth, and largely exported into the United States.

It is well known and abundantly proven that cloth made from such wool retains through all its transformations and rough handling germs of disease, and disseminates them broadcast. A German dying of small-pox, his clothing becomes useless for other purposes than old rags.

The American wearing a suit of clothes made of German cloth thinks little of the risk he is running, or of the condition of the person who has died, or worn at least a part of his suit before him. One must shut his eyes and go it blind when he makes up his mind to buy much that is brewed, baked, or manufactured in Germany, and to be at that reckless point that he does not care what may happen.

The adulterations of his cloth do not stop here. They sandwich in

with the wool of rags, and a small proportion of pure wool, a new *fiber* known as Cosmos, just brought into use as an adulterant, and which is considered by recent investigation to be injurious to health. I have been told by a medical gentleman from Verviers that cloth in which this Cosmos existed, if placed in proximity to a young child, the parts touched thereby would become inflamed, and that it would produce eruptions if it came in contact with the mouth of a child. It is no secret that this article enters largely into the manufacture of woolen cloth in Germany and Austria.

Our flour when found in these countries becomes foreign to such an extent as to be beyond recognition.

An examination of this article will show many adulterations that could not possibly have taken place in the United States, because these ingredients would be more costly with us than the genuine article of the same grade. These ingredients are numerous. I will only mention a few of them: plaster of Paris, baryta, and potato flour. Bread made from this flour is also adulterated.

Our lard is also doctored in many ways, tallow and horse fat being the most conspicuous adulterations.

If evil consequences follow from such wholesale adulterations (as often happens), there is always a means of escape, and the German loses no time in availing himself of it; he sings out lustily that it is in consequence of American adulterations.

There are some things that are so audacious in their character as to puzzle us to know how to treat them, whether grave or gay, and this charge of poison and adulteration coming from such a source is one of these things. It is the clever device of the juggler, who diverts the eye, while he cunningly performs the trick.

The charge that our flour, lard, and other products that we export to those countries are adulterated is palpably false and absurd. Is it probable that we would use adulterations that would cost us more than the genuine article, or would betray itself at first glance? Is it not reasonable to suppose that where those adulterations are found, in a country in which the adulterating article is cheaper than the genuine article (to say nothing of a common practice), that the adulteration took place in that country?

The United States exports many times the quantity of necessaries of life into England that we do to Germany. Belgium and other countries remain steady consumers of our pork and flour, and never a word was uttered against either until Germany commenced it. The case is simply this: when our products come into competition with the German home products, the latter suffer considerably, and in proportion to the magnitude of the former, the cry is raised of the "American invasion." It is treated, too, as a real invasion, and all the unfair methods known to warfare are resorted to.

If a choice was left with the German, he would naturally prefer buying an article that he could get at the lowest price, and a government that would try to force a dearer article on him would meet with opposition and be unpopular. In order to do away with this, and to carry out a made-up programme of prohibition, a prejudice must be created against the cheaper article, and hence the song of adulteration, poison and a copy of other falsehoods are raised. It has been proven by experience that protection is not popular in Germany, nor would prohibition be unless the public mind had been worked up to a state to receive it. The first act in this programme has been shrewdly executed, and our pork has been driven in disgrace out of Germany by an order of His

Majesty the Emperor. Emboldened by his success, the German now turns his attention to the next thing in order, our flour, and its fate is not hard to predict.

The same methods have been resorted to, the same prelude executed, and the same results will follow with this article as with the pork.

These things when allowed to go without protest injure us more than would at first glance appear. These sensational stories of deaths by the wholesale, caused by American adulterations, go from one country to the other with astonishing rapidity, and are accepted as facts, to the great detriment of our commerce, besides creating an impression abroad that there is nothing so monstrous as an American.

Our government, with commendable energy, met the charge brought against our pork, and, at no little trouble and expense, instituted an investigation that resulted in a complete vindication of our hog; but this did not have the effect it was intended it should have, because the edict of prohibition was issued some time subsequent to its publication.

It seems to me that if Germany can prohibit the importation of our products, on a trumped-up and foundationless charge, that we could return the compliment on their woolen goods and other articles, on reasons that can be proven against them by any fair investigation, and in that way bring them to see and repair the injustice they are doing us. If some means are not devised to check this unjust and shameful war on our industries, one after another of our productions will fall as did our pork.

If the effects of this war were felt in but one country we might allow these things to pass, but this is not the case. Any one who will look at statistics will see that the German war against our pork has injured its importation into all other European states. Apart from a commercial view, and other considerations mentioned no one can be so amiable in disposition as not to smart under a *system* of injustice so doggedly followed up, to say nothing of the methods used.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege and Verviers, December 12, 1882.

TRADE BETWEEN COLOMBIA AND THE UNITED STATES.

REPORT BY CONSUL SMITH, OF CARTHAGENA.

EXPORTS TO THE UNITED STATES.

The value of the declared exports from the consular district of Carthagena to the United States for the past eleven years is as follows, viz:

1872	$189,160 57
1873	114,375 32
1874	84,325 53
1875	128,780 50
1876	113,376 19
1877	260,459 65
1878	231,609 32
1879	2-4,848 62
1880	419,139 70
1881	382,995 78
1882	418,354 55
Total	2,627,425 73

While I am unable, owing to the great difficulty of procuring statistics from the customs officials, to give the quantities and values, it is safe to assert that there has been a corresponding increase during the same period in the imports from the United States.

The chief articles of export have been rubber, hides, ivory nuts, fustic, and cocoanuts.

Rubber.—The declared value of rubber exported for the last eleven years to the United States is $1,470,084.91, and the weight in kilos is 1,994,127. Although the difficulties in procuring this valuable forest product are becoming yearly greater, yet the recent high prices prevailing in the foreign markets have stimulated its gathering. New and accessible forests have been discovered. When a tree is found by the rubber hunters, it is immediately felled, in order to secure all the sap it contains. This unwise practice will undoubtedly continue until all the forests are completely exhausted. The present price for rubber in this market is $900 per ton of 1,000 kilograms.

Hides.—Of late there has been a large demand for hides from this market, and a consequent increase in their exportation. They are quoted in the New York markets as Bogota and Savanilla hides.

Ivory nuts.—Owing to the unsatisfactory prices ruling in the foreign markets for ivory nuts, their exportation has largely decreased. Thousands of tons of these nuts lie under the trees, only awaiting some one to come and cart them away; most of these nuts are procured from the San Blas coast and the Atrato River and its tributaries. It is a curious fact that in the New York market the Colon nut is quoted at ½ cent per pound higher than the Carthagena nut, although their respective sources of supply are precisely the same. Perhaps the commission merchants in New York can give our exporters here a satisfactory explanation of this discrimination in favor of the Colon nut. I have been unable to do so.

Fustic.—The exportation of the yellow dye-wood called fustic has increased more than any other article on the list, caused mainly by the people being compelled, on account of the locusts, to relinquish agricultural pursuits and seek a livelihood by getting out the products of the forest. The supply is nearly inexhaustible and easy of access. The price per ton delivered here is from $13 to $16.

Cocoanuts.—There was exported to the United States in 1879 over a million cocoanuts, and this year but 58,714. Cause for the great falling off, the destructive and all-devouring locusts. This trade will in a short time resume its normal condition, but I would not advise any of our fruiterers to send vessels until further advices from this consulate. There is not enough brought to market to supply the home demand. The present prices here are $40 to $50 per thousand. Had not the locusts devoured the cocoa buds, it is safe to estimate the exports this year to the United States would have been over two million nuts. Land admirably adapted for the cultivation of cocoanuts can be bought very cheap and within a short distance of this port.

Bananas.—As yet no bananas are exported. There is considerable interest manifested among the planters on the subject of raising bananas for export, in view of the enormous trade in this fruit now being carried on in the neighboring port, Colon-Aspinwall. What is needed is an enterprising American to come here and start the business on his own responsibility, the same as that wide-awake gentleman Mr. Frank did at Aspinwall.

Oranges and limes.—There are not enough oranges for home consumption, and those grown are of an inferior quality; limes, however, grow

in great abundance, and are of fine quality, equal in flavor to the best lemons and nearly as large. They can be bought in season from $1.50 to $2 per barrel.

Ginger.—The ginger-root of this district grows wild in great abundance, and will compare favorably with that produced in Jamaica.

Ipecac.—A bastard species of ipecacuana that commands a fair price in New York can be procured in any quantity.

Copaiba.—The export of balsam copaiba has very materially increased during the past three years.

Cedar.—In previous reports this consulate has dwelt so particularly upon the number of advantages to be derived by our dealers in cedar by making this district a base of supply, that is hardly necessary to say much more about it. I am in constant receipt of letters of inquiry from timber dealers asking for more information. I would here suggest that it would be worth their time to send down their agents to investigate the matter in detail, for I must confess an inability to give them more information in the premises than has already been furnished in previous reports. Several New Orleans and Boston timber firms have sent agents to this district, and the result of their investigations of these vast timber forests have been so highly satisfactory that the houses they represent are making arrangements to get out cedar and mahogany on a large scale. The field is wide enough for any number of firms without their respective interests coming in conflict. The mahogany of this country is of fair quality, but inferior to the Santo Domingo product. The quality of the cedar is excellent and bears comparison with that procured in Mexico and Cuba. A reliable firm at this port informs me that it would place cedar logs, in sizes to suit f. o. b., in harbor at $45 per thousand feet, American measurement. The same wood can be procured at Cispate Bay, a good and safe anchorage for vessels of large tonnage at all seasons of the year, for $25 to $30 per thousand feet, delivered alongside vessel. I shall take pleasure in giving the addresses of gentlemen who reside in the timber district of the Sinn River to any cedar firms in the United States, and from whom they may perhaps derive much practical information. The cedar forests are scattered all through this district and are easily accessible.

Gold dust—The value of the gold dust that was cleared through the custom-house for the past year was $94,628; of this, $20,590 went to England, $930 to Germany, $15,481.60 to France, and $26,617 to the United States. This, however, does not constitute the real value of the dust exported, as it is always underestimated on account of the steamers charging so much per cent. extra tariff, and frequently large amounts of the dust are placed in the personal charge of the captain. If the truth were known, the value is probably nearer $500,000 than $100,000. Carthagena receives annually about $600,000 of gold dust from the Choco (Atrato) regions, and it certainly does not consume $100,000 of this quantity.

Cattle exports.—The export of cattle, such as beeves, cows and calves, to Cuba began about four years ago. At the beginning of this business, 1879, a few schooners were employed in the business. This trade has now assumed large proportions, the three Spanish lines calling at this port all taking cattle to Cuba. In the commencement the trade was carried on in American bottoms, but since the discriminating duties made by Spain in favor of her own vessels, they have all been withdrawn. The cattle are what we would call in western parlance "scrub," but they are large, and in good condition when placed on board. The average weight is 450 pounds. The price delivered here from the savan-

nas is $25 per head, and the cost of transportation to Cuba is about $8 per head. The new Spanish tariff places $4.80 per head on cattle landed in Cuba from vessels carrying the Spanish flag, and $6 on vessels of other nations. The export for the fiscal year ending August 31 of cattle was 17,357 head, valued at $427,587.

Cocoa.—Several large plantations of cocoa have recently been started on the Sinn River, above the town of Monteria, notably by French companies, and the plants are in a thriving condition, one company alone having 350,000 plants set out and in the second year of their growth.

Rice.—There is but small demand at present for rice coming from the United States. The destructive ravages of the locusts during the last two years to the rice plantations of this State caused a necessary increase in its importation. It must be borne in mind that the rice is almost as much a staple article and necessity of life in this country as it is in the East Indies. Considering the sparse population, the importation during the past two years of this grain has been enormous. Numerous rice plantations are cultivated in this State, but on a small scale. Such is the prejudice existing in favor of the native rice that it is actually given the preference to our famous Carolina rice. That which is imported is ordinary Rangoon. Heretofore the American houses controlled this trade. The Liverpool and Manchester firms, however, I am sorry to state, have the monopoly to-day; am at a loss to understand why, for houses in New York import direct from Rangoon, and at as fair rates as English houses. Rangoon rice coming from Liverpool costs there 2 to 2¼ cents per pound, and the same shipped from New York 2½ cents per pound. The Colombian merchant will undoubtedly give the preference to American houses, provided he can purchase as cheap as from English firms, as the facilities for transportation and freight tariff and dispatch are in favor of the former. The rice grown in Colombia is much inferior to the Rangoon article, for reason of the cleaning process in vogue, which is very primitive. The rice is flayed, the consequence being that many of the grains are but partly hulled, besides containing numerous particles of sand.

Rice Machines.—What is greatly needed to make the Colombian product a superior article is American machinery; that which is particularly adapted for small-grained rice. The machines sent heretofore have failed to give satisfaction, and after a good trial have been discarded. This I have alluded to in my last annual report. Several of our manufacturers of such machinery have written this consulate upon the subject, taking it to task because such mention was made, and denying the truth of such statement. I have failed, however, to see any of their machines in the market. I am frequently called upon by rice planters to recommend them a good machine. A list of the names of manufacturers of such machines is given them, and their immediate reply is, "Their machines won't work; we have tried them." On the other hand, our manufacturers assert it is not the fault of their machines, but the trouble lies in the ignorance of the persons handling them. If such be the case, it will surely pay them to send an expert to this section to teach the planters how to use them.

Corn.—Three crops of corn are annually raised in this district, and is much preferred to that coming from the United States. A part coming from Venezuela and Cuba and the remainder from the United St tes make up the source of foreign supply. The demand for this staple was stimulated by the destruction of the native crop by the locusts. Owing to the abundant crops in some sections of the state where the locusts have not reappeared, there will be but little demand for the foreign

product. In years past corn was brought to this port in quantities to suit, and sold at 25 cents per bushel. Colombia may, in years to come, when she is more densely populated, be a possible rival to the United States in shipments of corn to Europe. At present, however, she has more than she can attend to to supply the home demand. The price current is $2.30 per bushel, shelled, in bags of two bushels, and the white preferred to yellow or mixed.

Agriculture.—Agriculture has not materially advanced in any section of the coast lands since my last report on the subject, and I am sorry to observe will remain in its present unsatisfactory state until the planters will consent to forego their present mode of cultivation.

IMPORTS FROM EUROPE AND THE UNITED STATES.

Clocks and watches.—A clock or watch of European manufacture is seldom displayed on the shelves of the stores, the American article entirely superseding all other manufactures. The "Seth Thomas" is the favorite clock, with prices varying from $4 up to $8. Waltham and Elgin watches sell at good prices.

Arms.—Although the country has been and is in a peaceful state, the universal custom of carrying arms prevails. I never heard of their being used, however, except on a harmless target. Smith & Wesson revolvers (38 caliber) are the favorite revolvers. Sporting rifles and air-guns sell well, and so does a cheap single-barrel shot-gun. The Colombian government has armed its soldiers with the Remington rifle and revolver.

Sewing machines.—The use of sewing-machines is becoming universal, but the trade would be rapidly extended provided a cheaper priced machine were put on the market, a machine that would sell for $30. The "Howe," "Remington," "Avery," and "Domestic" are the most popular. If the other manufacturers care to introduce their articles, they must establish a regular agency at this port. The consular mail is flooded with sewing-machine calendars, but can't the manufacturer send along one of his machines with request that I place it on exhibition? The expense to him would be small, and it is a pleasure on my part to do what I can to properly introduce our manufactures. A machine, to sell readily in this market, must be light running, light weight, easy treadle, and cost about $30.

Carriages.—Carriages are now coming into general use. With but few exceptions, the majority of them are imported from France, and, being heavy and lumbering, are ill adapted for use in this warm climate, where the horses are small and not very strong. It is about as much as two horses can do to pull the coach and driver of those now in use. Hence exists an opportunity for the American manufacturer to enter into an active and successful competition with his European rival by introducing basket phaetons and two-wheeled carriages for one horse, and baronches and broughams for two horses. They must be constructed of the lightest materials consistent with strength and durability, as the customs duties are on gross weight, which includes packing material and box. The carriages come entire, seats, cushions, lamps, &c., &c., packed in an immense box. Should any of the appurtenances come separately, they are then subject to a duty pertaining to their respective classes. As the streets of this city are extremely narrow, due attention must be paid to this in the construction of carriages, in order that sharp turns can be made. The ordinary American farm wagon of from one to two tons' capacity is soon destined to be in de-

mand, on account of wagon roads connecting this port with interior towns of the state being in course of construction. Such a class and style of wagon as the "Studebaker" "South Bend" would sell well. Lightly-constructed carts, to take the place of the huge and unwieldy ones now in use, are greatly needed. The harness in use comes from France, and cannot compare with the American make, either in lightness, strength, or fitness.

Butter.—Since I have resided here the quality of American butter that has come to this market has been decidedly inferior to that of the European product, especially the Danish article. It must be specially prepared for this warm climate, possess a fresh taste, and contain not much coloring matter. The American article has a salt taste, and when a can is opened it rapidly becomes rancid. The Danish article is sweet, contains but a small quantity of salt, and is of a slight yellow color, and does not on exposure become rancid very quickly. Butter should come in tins of 1, 2, 10, and 25 pounds. The one-pound tins sell readiest. Owing to the fact that no butter is made in this country, there is always a fair demand for the foreign article, prices ruling 40 per cent. in favor of the European product. Although there are any number of fine milch cows and an abundance of grazing land, such a household article as a churn is quite unknown.

Cheese.—Next in importance as an article of food, after the *ballo* (made from corn-meal) and plantain, comes cheese. Among the poorer classes it takes the place of meat. It certainly produces muscle, for among the class of persons that use it as a daily diet I have never seen a finer set, physically speaking. The native cheese is made in the simplest manner, and resembles in taste our "cottage cheese." Its price is nearly equal to that of the imported article, the native selling at 25 cents per pound and the foreign at 30 cents. Of the foreign article, the round Dutch cheeses have the preference, English next, and American last. Why this preference to our detriment I am at a loss to explain.

Hams.—At one time American hams enjoyed a fair reputation, but the absurd cry of "trichinosis," coupled with the fact that the exporters of this provision did not send as good quality as formerly, has placed them at a discount, and now the universal cry is, Give us good old "Westphalia" and English hams. Our packers, if they desire to extend their trade in this direction, must send a better article than they do now. To illustrate the prejudice existing against our hams I may cite that I received a small consignment of fine Kentucky sugar-cured hams, the smallest ham of the lot weighing 18 pounds. In vain did I try to sell them at cost price, but the fact that they were American prevented the sale. I turned them over to a merchant in the town and told him to dispose of them at any price rather than have them spoil. What was my surprise when a few days after he told me that he had sold them all at 45 cents per pound, the price of the English article. He explained that he took off the wrappings, placed the hams in a smoke-house for a few hours, and sold them as English hams, stating to the buyers that it was a new style cut. Since then, he informed me, he has had numerous calls for the new-style-cut English hams.

Canned goods.—Although there is a high duty on all canned goods, yet there is a moderate demand for them, especially those put up in the United States. Those adapted for this market are peaches, pears, and grapes, in two pound tins. Canned preserves, such as strawberries, raspberries, cherries, cranberries, &c., would sell rapidly after once properly introduced. There is no demand whatever for canned tomatoes and corn, as the fresh article can be procured the entire year. Canned peas, small,

are very much liked. I have seen only the French article in the market. There is some demand for American corned beef, salmon, and oysters (two-pound cans). Canned mutton would sell, as there are no sheep raised on the coast lands.

Salted and preserved provisions.—Mess beef and pork find no sale in this market. There is a good call for codfish.

Lard.—American lard is in good demand, of fine quality and fair prices, and is rapidly superseding the native product, which is a most inferior quality. It is a matter of pride for me to state that our American exporters of this article have justly acquired an excellent reputation for the great care they have taken in keeping it up to the standard quality. European lard, in spite of the old, old cry of trichinosis, is no longer seen in the market.

Vegetables.—Vegetables, such as onions and potatoes, in order to stand the climate here any length of time, must be selected with extreme care and be properly packed. As it is, on arrival of vessel, they are generally found in bad condition. France is our rival for these vegetables in this market The onions, small and much inferior in taste to the American, arrive in sound condition, and stand the climate two and three months. They come packed in wicker baskets. The American exporter sends them in flour barrels, poorly ventilated. The French potato as it appears in this market is soggy and tasteless, yet it commands about the same price as does the American article. Potatoes cannot stand this climate for more than three weeks, no matter how carefully they may be handled.

Flour.—The consumption of flour has increased greatly during the past two years, owing to the locusts having eaten up the corn and plantain crops, and the incidental remission of the national duties. Although the general government has by recent decree restored the duties, I am of opinion that once having found how superior is bread made from wheat flour to their almost indigestible "*ballo*," the Colombians will continue to use the former article. It is most difficult to introduce a new brand of any article into this country, but when once the object is attained it will remain a standard for years. A superior quality of flour is used in this market; lower grades will not sell. A brand called "La Union" is given the preference over any other mark, and the flour is of excellent quality. It is said that some of the houses in New York, knowing from long experience that it is better to adapt themselves to the tastes, customs, and caprices of the people with whom they deal—in other words, cater to their wants—have sent to this market thousands of barrels of flour that originally were marked with other brands than the favorite "La Union." A merchant received a consignment of a splendid quality of flour ("Minnesota patent process"), costing $1.50 per barrel more than any other flour, but could not sell it until he had put the flour into empty barrels on which was the "La Union" mark. He then had a ready sale for it. The consumption of flour for this port and vicinity is about 800 barrels monthly. The present price is $16 per barrel in gold. The cost of a barrel of flour delivered here is as follows:

Cost in the United States	$6 00
Freight	80
Insurance	10
Commissions	15
Lighterage	15
Cartage	05
Duties	3 56
State tax	2 02
Total	12 83

Very little Western flour comes to this market; it comes mostly from Maryland and Virginia. I would suggest the experiment of sending to this port on the part of our exporters flour put up in strong paper bags.

Corn meal.—There is but little demand for American corn meal, and I would not advise any consignments of the same.

Drove wells.—The water used by the inhabitants comes from the immense cisterns built in the walls of the city by the Spaniards, and those constructed in private houses. The quality of the water is generally good, but towards the end of the dry season it is not the best in the world, as the public cisterns are but seldom cleaned. Then the inhabitants must depend upon the private cisterns. Water is sold at from 5 to 15 cents per keg. I am of the opinion that if wells were bored to a proper depth good water would be found. Just the thing for this country are the American drove wells. I am unable to learn of their having been ever introduced in Colombia. Any number could be sold on the savannas where the cattle are grazed, and where they are frequently driven 20 miles for water, especially during the dry season. Sending circulars will not do. Let some manufacturer put down a well at his own expense. The experiment, should it prove a success, will make his fortune.

Pumps.—An enterprising pump manufacturer from Seneca Falls sent a few of his pumps—the ordinary force-pump—to this port about two years ago. Their article is superseding the European make. Several hundred are now in constant use, and each one is a standing practical advertisement for the company.

Shoes.—The shoes are all hand-made. The fine leather comes from France and the sole leather from the United States and the State of Cundinamarca, in Colombia. The shoes are handsomely made, and in a most expeditious manner. You give an order to-day for a pair of shoes, and the next day they are handed to you. Notwithstanding the high duties on the imported shoe—60 cents per kilogram—there is some demand for them, especially for ladies' shoes, gaiters, and slippers, which come from France. The American style of shoe is coming into general favor.

Shirts.—England and France supply the market with shirts. They are poorly made and ill fitting. The prices are $30 to $36 per dozen. A good strong cotton shirt, with linen bosom and open at the back, with cuffs, but no collar attached, would readily sell at $2, the same costing in the United States from $9 to $12 per dozen. Cheap India gauze for undershirts and drawers is worn. Have never seen cotton drawers in this market.

Hats.—Straw hats are going out of fashion, and the "English Derby" (from France) taking their place.

Pianos.—Pianos and other musical instruments have been entirely neglected by our exporters. No effort, so far as I am able to ascertain and observe, has ever been made by them to introduce their instruments to the public of this music-loving country. Of the three hundred and more pianos in use, but three are of American make. Considering the hold our manufacturers have gained in other countries, it becomes a matter of surprise that their instruments are almost unknown. In this line Colombia is certainly a good field to work up. It is needless for me to mention that the French and Germans have the field for themselves so far.

Organs.—Organs are not used except in the churches, and no demand whatever for them. As a musical instrument, the violin is almost unknown; only three in the city, and they are regarded as curiosities.

The deficiency in fiddles is made up in the popular use of brass instruments and drums. Every little pueblo has its one and two brass bands, even if the population has to be largely drawn upon to complete the *personnel* of the band. The taste for music is highly cultivated among the better class of Colombians.

EDMUND W. P. SMITH,
Consul.

UNITED STATES CONSULATE,
Carthagena, November 1, 1882.

SUMATRA TOBACCO.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM, ON THE EXPORTS OF SUMATRA TOBACCO TO THE UNITED STATES AND TRANSACTIONS IN SAME IN THE NETHERLANDS IN 1882.

It is not quite three years since a few dealers in tobacco and manufacturers of cigars in the United States had first their attention attracted to Sumatra tobacco, with a view of introducing and using it for cigar wrappers.

From this port shipments of the article began to be made during the latter half of the year 1880, and, considering that this trade has only so recently taken its rise, and that by this time it has already assumed rather important proportions, I felt called upon to prepare the present report, giving some information concerning the same.

In order to show, as nearly correct as possible, the course this trade has taken from its commencement to the present time, I made up the following statement, which exhibits the quantity and value of such tobacco shipped from Amsterdam to the United States during each quarter since such shipments first began to be made, viz:

Quarters ending—	Quantities.	Value.
	Bales.	
September 30, 1880	311	$37,694
December 31, 1880	454	52,113
Total	765	89,807
March 31, 1881	None.	None.
June 30, 1881	558	56,958
September 30, 1881	1,162	128,474
December 31, 1881	1,059	114,758
Total	2,779	300,190
March 31, 1882	496	52,203
June 30, 1882	1,464	140,184
September 30, 1882	2,245	254,372
December 31, 1882	2,785	333,254
Total	6,990	780,013

From this statement it will be observed that the export of the article to the United States is constantly and very largely increasing; and when it is further taken into account that certain quantities of it were invoiced and shipped from Rotterdam and Bremen as well, it may safely be stated that about 9,000 bales of Sumatra tobacco entered our markets in 1882.

What has created, increased, and what sustains this trade appears to be:

1st. That certain qualities of Sumatra tobacco in certain dark colors have been found to be peculiarly and advantageously adaptable for cigar wrappers, and are gaining more and more in favor with manufacturers of cigars in the United States; and

2d. The ever-increasing crops of the article, thus also increasing the supply of the particular sorts especially suitable for the American market.

The recent animation in this trade has undoubtedly furthermore been stimulated by the removal of the 10 per cent. discriminating duty, formerly payable thereon, being a product of the East Indies, exported from the west of the Cape of Good Hope.

This will be clearly evident when I state that many shipments, aggregating large quantities of this tobacco, purchased or ordered for months last past, were purposely delayed until late in December, so as not to arrive until after the law abolishing the discriminating duty had gone into effect.

This unlooked-for introduction and now so considerable export of this staple into the United States has begun to be viewed with great distavor by cultivators or growers of "seed-leaf" tobacco in the United States.

They apprehend, as I am informed, that the imports of Sumatra tobacco into our country will increase still further in the near future, and seem to consider this would prove greatly detrimental to their interests.

I am hardly in position or prepared to express an opinion as to how well grounded or justified their fears really are, and, moreover, am inclined to believe that the interested parties are the better judges of this matter, but so far as I can possibly make myself serviceable by giving information which may assist them in reaching correct conclusions on the subject I deem it my duty to do, and do cheerfully.

Such information may possibly also be of some value to Congress in its present consideration of our tariff when the article of "leaf-tobacco" is reached.

Thus I would report that up to the present the production of the article has increased from year to year without any intermission from the beginning of its cultivation in Sumatra in 1865, when it amounted to only 189 bales.

In this connection I would respectfully refer and call attention to my report on "The tobacco trade of the Netherlands in 1881," dated March 7, 1882, and printed in the volume of monthly consular commercial reports No. 18, of April last, as it contains a statement showing the crops of Sumatra tobacco each year from 1865 to 1880, inclusive, and the average prices realized from its sale.

The crop of 1881 is represented to have footed up 82,356 bales, valued (approximately) at $5,791,880, being an increase over the crop of the previous year (1880) of 17,433 bales as to quantity, and of $1,260,000 as to the approximate value thereof.

From the foregoing it will be seen that about one-ninth of the whole crop of 1881 has been exported to the United States.

The entire crop, excepting about 1,700 bales remaining in the hands of the original importers or consignees here, on December 31, 1882, was disposed of at an advance of about 1 cent, United States currency, in the average price as compared with that realized in 1881 for the crop of 1880; or, in other words, the total crop of 1880 brought on the average about 45¾ cents, whereas the crop of 1881 averaged about 46¾ cents, United States currency, per half-kilogram.

This refers to the prices originally obtained at the various sales throughout the year by the importers or consignees, first hands.

As regards the prices for the particular sorts which during the year found their way to the United States, and which are usually purchased from quite a number of firms in the wholesale tobacco trade through the mediation of brokers, they differed all the way from about 45 cents to 95 cents, United States currency, for the half-kilogram.

Thinking it might prove interesting, if not important, to parties in the United States in any way concerned in this matter, to be informed as to the extent and quality of the crop of 1882, I made inquiries relating to it, and ascertained as follows, viz:

"That whilst it is impossible to state, at this early day, with accuracy the yield of the crop, it is generally considered and expected to have been again in excess over the previous one, and that it amounts to about 90,000 bales.

Its quality is represented by the planters to be very good, so far as they are able to judge, but this can, of course, only be determined later on, after the tobacco has gone through the process of fermentation.

The first parcels of this new crop will arrive here about the month of March next, and will be offered for sale about a month or six weeks thereafter.

In concluding this report, I would remark that the year 1882 has been a most favorable one for tobacco planters in Sumatra and for those interested in tobacco plantations there, and so have those connected with the trade here realized handsomely by the year's operations.

I am, therefore, induced to state that so long as the present general demand for the article continues there will be neither lack of capital nor labor, so long as either can contribute to an increase in its production, and it would seem to be more a question as to the extent of acreage in Sumatra adapted for its cultivation, as only once in four or five years a crop can be raised on the same soil without danger of producing a very inferior quality of tobacco.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, January 3, 1883.

TURK'S ISLAND SALT.

REPORT BY CONSUL SAWYER.

There is not much that is new or that will interest the merchants trading with these islands for me to communicate at this time. The principal business is that of manufacturing salt, and such has been the fact since the first settlers came here from Bermuda, before the war of the revolution.

SALT MANUFACTURE.

This island, Grand Turk, and the Caicos are particularly well adapted by nature for this business. This island is about 5 miles long and 2 broad. The southeast side is fringed with a high bank, having the appearance of having been formed by the ceaseless action of the waves in the indefinite past. This wall affords protection from a sudden inundation by a tidal wave from that quarter, the point from which come the prevailing winds.

Running through the island the longest way is a sag or valley, in which are located the salinas and salt ponds. The northwest side is skirted with a beach, but not so high as that on the northeast side. The land on which are located the ponds is on a level with the sea. A canal, neatly walled with stone, conducts the water from the sea to a reservoir, which feeds the "pans" when needed, or when the elements have converted the sea water into brine strong enough to be used in the pans.

There are two kind of saline resources for the conversion of salt water into salt. One kind may be called a "saline" proper, and the other a "salt pond." The latter has a never-failing supply of water, being fed by springs of salt water.

A saline proper is a flat, and it may contain a few acres or a great many, and is supplied with water from the ocean by the canal already named, which can be opened or closed at will. The first water let in from the ocean goes into a large reservoir, which holds about half as much as the entire area of the salina. The water remains in this receptacle some weeks, evaporation continually going on by the action of the wind and the sun. When it reaches 60° or more, as measured by a salometer—salt water being between 10° and 12°—it is fit to be turned into the division called pans, which is done either by hand water-wheels or wind-mills. At 60° all foreign matter held in solution is precipitated.

The "pans" vary in size, but generally are from one-eighth to three-fourths of an acre in area; are laid out so as to allow watercourses between each for the purpose of obtaining a supply of "brine" from the main reservoir. The divisions are separated by walls made with stone and mud. These are about 2 feet high, with a width from 3 to 4 feet. These "pans" are generally "raked down," and the *débris* thrown out once a year. This is called "cleaning pans."

The brine seldom crystallizes into pure salt unless there has been a month's absence of rain. It becomes a saturated solution at 96° and commences to crystallize at 110°, as measured by the salometer. To be gathered, the salt has to be broken up by hand by an instrument called a "break-up." It is then raked into rows to be carted into piles or heaps, some of which contain as many as 10,000 bushels. The pans yield from 5,000 to 8,000 bushels per acre during the season. The canal has to be opened sometimes at low-water to prevent an overflow of the pans from the reservoir after a rain.

A salt pond is distinguished from a salina by having a basin or a spring of salt water in the center, and has its pans on a little higher ground. The basin is also a reservoir whose water is evaporated and becomes brine sooner or later, according to the state of the weather. The methods of manufacture are about the same in the two classes. Care must be taken to have the water as pure as possible.

THE ANNUAL YIELD.

The crop gathered each year does not vary much from about 2,000,000 bushels, with perhaps a quarter of the crop left over; so the annual sales amount to about 1,500,000 bushels, one-half made on this island, and the balance equally divided between Salt Caye and Cockburn Harbor.

WHERE IT GOES.

About two-thirds of this goes to the United States in coarse salt, and in American bottoms, and the balance to various ports in Nova Scotia in fine salt, or "fish salt," to supply the fishermen. Of late years the salt

merchants here have put up mills for grinding the coarse salt made here to a fineness suitable to cure fish with. This fact has enlarged their trade with Nova Scotia.

WHAT IT COSTS.

It is very evident that the business as now conducted leaves no margin for profit for the manufacturer. For, first, the manufacturer has to pay the local government a royalty of 10 per cent. *ad valorem*, the price being fixed annually by the local government.

Secondly, the season may be unpropitious, thereby increasing the cost of manufacture.

Thirdly, the waste while waiting a sale and shipment, and the cost of cartage to be shipped, and the cost of putting the same on board the vessel that takes it to market, which latter charge amounts to 1¾ cents per bushel and comes out of the seller.

The average price per bushel is 6 cents for coarse and 8 cents for fish salt; if anything, a little off of these prices.

TRADE RELATIONS.

The natural drift of trade is to the United States, principally to New York. The United States steamer George W. Clyde, of the Clyde line, New York, makes a round trip from New York to Cape Haytien, Santo Domingo, &c., touching at this port each way once in five weeks. She takes the American mails each way, and without compensation, I understand. Her average freight list amounts to 1,000 barrels from New York to this port. I may add here that this enterprising company is about to add another steamer to this line for some months to come.

The English mail steamer of the Cunard line, the Alpha, makes the trip from Halifax to Jamaica, touching at Bermuda and this island, once in four weeks. She carries the mails and government dispatches, and receives for this service from the local government here, for her share, $4,000 per annum, or £800. Her freight list to this place from Halifax does not average 150 barrels.

SALT SHIPPED TO THE UNITED STATES FOR THE QUARTER ENDING DECEMBER 31, 1882.

This quarter is not much of a criterion, as it is larger than common, but it foots up well, and so I give it:

Whence.	Bushels.	Value.
From Salt Caye	188,849	$11,359 37
From Cockburn Harbor	184,134	11,386 60
From Grand Turk	165,350	10,257 40
Total	538,333	33,005 37

Salt Caye is a small island about 5 miles from this port. The Caicos Island—or islands, in reality but one island, separated into a number by small creeks—is about 50 miles long. East Harbor, or Cockburn Harbor, is about 20 miles from this port. Most of the inhabitants are engaged in the salt business in some capacity, and yet some attention is being paid to agriculture. The commissioner of the colony, with

commendable zeal, is making the attempt to introduce the culture of tropical and semi-tropical fruits. The enterprise bids fair to be successful. Some interest has been manifested in the cultivation of the agave plant, a fibrous plant of great value, and it is claimed that this plant can be successfully grown on the Caicos Island, and to large extent, as there are vast bodies of unused lands ready to be put under cultivation.

I may say, without trenching on forbidden ground or seeming to meddle with the internal concerns of a people of another nationality, that the far-seeing and sensible business men of the colony are looking ahead for the profitable employment of the people in another and a new industry that will promise better returns than that of manufacturing salt.

At Breezy Point, East Caicos, guano-deposit beds have been discovered, and one of the active business men of this place has been working them, one would judge, successfully. If this new enterprise succeeds, it will be of great value to the colony.

I may add, *en passant*, that the business men complain of the high tax that the American Government has placed on salt, almost or quite one hundred per cent. And since the trade relations of this colony are so close, this high duty on foreign salt does seem excessive, and a real impediment to a more general trade.

POPULATION.

The population of Grand Turk Island is put down at about 2,000, one-fourth white, and that of the whole colony at 4,732, and about the same proportion as to color.

FREIGHT, LOCAL DUTIES, &C.

The freight on the Clyde steamer from New York is 70 cents per barrel, and on the English steamer from Halifax, I think, the same. I inclose the local tariff of duties imposed on all importations, no matter from where shipped—the same from Halifax as from New York. It is a duty imposed to raise funds to support in part the local government, but all such laws have to be submitted to the home government for approval before they go into operation.

N. K. SAWYER, *Consul.*

UNITED STATES CONSULATE,
Turk's Island, January 15, 1883.

Value of exports of domestic produce and manufactures in the years 1880, 1881, *and* 1882.

Articles.	1880.			1881.			1882.		
	£	s.	d.	£	s.	d.	£	s.	d.
Salt	20,155	14	11	22,908	10	2	21,095	6	5
Cave earth	2,952	0	6	697	13	0	1,205	12	8
Sponge	.....			429	15	11	720	14	0
Fresh fruit	.....			.....			13	12	0
Straw, braziletto, &c	1,645	7	10	280	0	0	296	2	5
Total	24,753	3	3	24,315	19	1	23,331	7	6

Value of imports for the years 1880, 1881, *and* 1882.

	£	s.	d.
1880	24,729	2	5
1881	27,054	4	6
1882	26,822	11	3

Quantity of salt exported from each port for the years 1880, 1881, *and* 1882.

Ports.	1880.	1881.	1882.
	Bushels.	*Bushels.*	*Bushels.*
Grand Turk	452,599	593,626	659,225
Salt Cay	192,817	478,660	476,530
Cockburn Harbor	289,990	358,610	406,372
Total	935,406	1,430,896	1,542,082

Salt in the colony on December 31—	*Bushels.*
1878	85,000
1879	1,500
1880	700,000
1881	1,000,000
1882	650,000

Rainfall at Grand Turk, Salt Cay, Cockburn Harbor, and Kew for each month of the year 1882.

Months.	Grand Turk.	Salt Cay.	Cockburn Harbor.	Kew.
	Inches.	*Inches.*	*Inches.*	*Inches.*
January	.62	.80	1.00	No return.
February	2.02	1.01	.....	Do.
March	1.06	1.18	.68	Do.
April	.92	.52	.30	Do.
May	2.93	2.30	3.17	Do.
June	.39	.72	.17	Do.
July	.68	1.34	.37	Do.
August	.81	.61	2.13	2.62
September	3.34	3.56	2.56	5.66
October	2.22	2.65	1.84	9.00
November	1.31	.76	2.03	5.19
December	2.65	2.59	.72	4.91
Total	18.97	18.04	14.97	27.38

Return of the number and class of vessels that passed the light-house, at Grand Turk, by daylight, in 1882.

War vessels	1
Steamers	22
Ships	0
Barks	44
Barkentines	24
Brigs	8
Brigantines	160
Three-masted schooners	38
Schooners	98
Total	395

R. B. LLEWELYN,
Commissioner.

COMMISSIONER'S OFFICE,
Grand Turk, January 23, 1883.

TARIFF OF TURKS AND CAICOS ISLANDS.

	Duties. £	s.	d.
Alcohol and spirits of wine.....per gallon..	0	4	0
Ale, beer, porter, cider, perry, in quart bottles.....per dozen..		0	6
Ale, beer, porter, cider, perry, in wood.....per gallon..		0	2
Asses.....	1	0	0
Bay rum and bay water.....per gallon..		1	0
Beans and pease, not split.....per bushel..		0	3
Biscuit and bread.....per 100 pounds..		1	4
Brandy.....per gallon..		4	0
Bulls, cows, and oxen.....each..		6	3
Butter.....per 100 pounds..		8	4
Calves.....each..		2	0
Candles, tallow.....per 100 pounds..		3	0
Candles, other than tallow.....do....		6	3
Cheese.....do....		6	3
Chocolate.....do....		6	0
Cigars.....per M..		10	0
Cocoa.....per 100 pounds..		1	0
Coffee.....do....		5	0
Cordials.....per gallon..		5	0
Cordage and rope (new).....per 100 pounds..		4	2
Corn and other unprepared grain, not enumerated.....per bushel..		0	2
Currants, raisins, figs, and prunes.....per 100 pounds..		8	4
Fish, dried or salted.....do....		1	0
Fish (pickled), salmon, shad, and mackerel.....per barrel..		6	3
Fish (pickled), in kits, and smoked fish, except herrings....per 100 pounds..		4	2
Fish, not enumerated.....per barrel..		4	2
Flour, wheat.....do....		3	9
Flour, other than wheat.....do....		1	6
Gin, whisky, and other spirits, not herein enumerated.....per gallon..		3	3
Horses, mares, and geldings.....each..	2	0	0
Hull and materials of vessels, wrecked, stranded, derelict, or condemned, ad valorem, 15 per cent.			
Lard.....per 100 pounds..		4	2
Lumber, yellow or pitch pine.....		9	0
Lumber, pine, other than yellow or pitch pine.....		6	0
Meat, salted or cured.....per 100 pounds..		4	2
Molasses, honey, and sirup.....per gallon..		0	2
Oil, olive and almond.....do....		1	6
Oil, sperm.....do....		1	0
Oil, lard.....do....		0	6
Oil, all others not enumerated.....do....		0	4
Paints, in oil.....per 100 pounds..		4	2
Pitch, tar, rosin, and turpentine.....per barrel..		2	0
Rice.....per 100 pounds..		1	0
Rum, 24° proof.....per gallon..		3	0
And one penny per gallon for every degree stronger, and for every degree weaker one penny less per gallon.			
Sheep, goats, lambs, and kids.....each..		1	0
Shingles (cypress).....per M..		2	0
Shingles, other than cypress.....do....		1	0
Shrub.....per gallon..		3	0
Soap.....per 100 pounds..		3	0
Spirits of turpentine.....per gallon..		0	3
Sugar, refined.....per 100 pounds..		8	4
Sugar, muscovado.....do....		4	2
Sugar, clayed, and all other not enumerated.....do....		6	3
Swine.....do....		4	2
Tea, green.....per pound..		0	6
Tea, black.....do....		0	4
Tobacco, manufactured, other than cigars.....per 100 pounds..		8	4
Tobacco, unmanufactured.....do....		4	2
Wines.....per gallon..		1	0
And 10 per cent. ad valorem.			
Articles not enumerated, ad valorem, 10 per cent.			

ARTICLES EXEMPTED FROM DUTY.

Articles imported or supplied out of a bonded warehouse for the colonial service.
Articles of every description imported or supplied out of a bonded warehouse for the use of the commissioner.
Boats and materials for whale fishery.
Bullion.
Cart harness, carts, cars, and drays and parts thereof, and cart grease.
Coin.
Coal, charcoal, and coke.
Cotton wool.
Diamonds.
Dye-wood.
Flax and tow.
Fruits and vegetables (fresh), and roots of all kinds.
Hay and straw.
Ice and articles preserved in ice.
Iron rails and other manufactured materials for railroads and wharves.
Lignum-vitæ.
Machinery of all kinds used in the manufacture of salt.
Mahogany.
Manures and earths of all kinds.
Maps and charts.
Mules.
Nuts (cocoa).
Oats, bran, shorts, ground feed, rice meal, oil cake, and oil meal.
Ores and minerals.
Osnaburgs and bagging and bags and sacks for salt.
Passengers' baggage and professional apparatus.
Poultry.
Printed books and pamphlets, not being reprints of British publications secured by copyright.
Provisions and stores of every description imported or supplied from a bonded warehouse for the use of Her Majesty's land or sea forces, and all cattle and other live stock imported by any contractor for the supply of fresh meat for the same.
Spades and shovels.
Specimens illustrative of natural history.
Submarine apparatus and diving dresses.
Sugar-canes.
Tallow and raw hides.
Tannin.
Tortoise shell.
Trees, shrubs, plants, and seeds for planting.
Turtle and fish, alive.

NOTE.—All goods the duties upon which are not less than £1 may be warehoused on first importation and exported from the warehouse without payment of any duties. When the import duties on first importation amount to or exceed £20, and not exceed £40, a credit of two months is allowed, and on sums exceeding £40 a credit of three months.

PROHIBITED.

Gunpowder, ammunition, arms or materials of war, except from the United Kingdom or any British possession, and base or counterfeit coin.

Light duty.—Per ton, 4*d*.
Royalty.—On salt, 10 per cent. ad valorem.* On cave earth, 2*s*. per ton of the ship's register.

TO THE GLUE MANUFACTURERS OF THE UNITED STATES.

REPORT BY CONSUL LATHROP, OF BRISTOL, ENGLAND.

Bristol manufactures largely of chemicals; consequently they are cheap. Sulphuric acid sells for one-half here of its cost in the United States. The cheapness of this important agent renders possible the

* By ordinance No. 10 of 1855. for regulating weights and measures, the bushel measure for salt is made to contain 35 imperial quarts.

profitable utilization of products which it is understood are generally wasted in America. Certain facts about the manufacture of glue will illustrate this pointedly, and I will suggest how, under certain conditions, the American manufacturer of this commodity can utilize some of his product which, it is supposed, goes largely to waste.

It takes eight tons of stuff to make one ton of glue. The seven tons residue goes about four and a half tons to water, and the other two and a half to refuse. Of course these figures vary much according to the original quality of material used, but they represent about the average.

The two and a half tons of refuse contain more or less fatty matter, which is generally extracted for making soap, and the remainder of the product, more or less large, as the original product was more or less fat, it is supposed, is not utilized by the American manufacturer. Nevertheless, it is rich in excellent fertilizing qualities, and, where sulphuric acid is cheap, can be turned into an excellent land dressing at a reasonable profit. It sometimes happens that so much fat was in the original materials that this final product is valueless, and other causes sometimes combine to deprive it of the essential fertilizing elements. As a general thing, however, it is certain to be of some excellence, and emerges from its sulphuric acid bath, not the disgusting and evil smelling material of before, but a clean and excellent fertilizer, not of course nearly so rich as the pure phosphate, but valuable either as a cheap manure or to mix with pure Carolina phosphate, thereby materially decreasing the cost of the latter and securing for many purposes a sufficiently rich land dressing.

Not only can the manufacturer here utilize the waste of his own factory, but he can as well purchase the refuse from other establishments. He can work it at a profit if it comes to him on the deck of the ship in America at five dollars the ton; that is, providing it is of the same richness as the waste of his own place here generally is. He must have it at a time when freights are so that it will not cost him more than five dollars the ton.

There are many times when it can be transported at this rate or less, and I should think it would be profitable to the American manufacturer to get five dollars per ton, out of which he must provide casks and cost to the ship's deck. The manufacturers here, should trial casks prove valuable to them, stand ready to purchase whole cargoes.

LORIN A. LATHROP.

UNITED STATES CONSULATE,
January 4, 1883.

AMERICAN FLOUR IN BRISTOL.

REPORT BY CONSUL LATHROP.

Bristol would seem from its position on the map to be the natural entrepot for American products intended for general distribution through Southern England; and it is to a great extent the distributing center for that section as well as for Southern Wales. Indeed, so regular and constant a market has Bristol in the latter section that Bristol is said to feed Southern Wales almost entirely, notwithstanding the circumstance that both Cardiff and Milford Haven have steamers running with more or less regularity to American ports. The trade in breadstuffs has become fixed by way of Bristol, and I am informed that a large por-

tion of the breadstuffs carried on these direct Welsh lines is on account of Bristol importers or through Bristol commission merchants, thus, to all intents and purposes, becoming a part of the Bristol trade.

Those artificial elements that are liable to be introduced into any mercantile community, however, sometimes occur in Bristol and temporarily change to some extent the field of trade, enlarging it perhaps and perhaps contracting it. For instance, it sometimes happens that a glut of flour in London will compel the London dealer to dispose of his stock at such a rate that he can undersell the Bristol merchant almost in Bristol itself, and vice versa the Bristol man sometimes supplies the demand for flour almost up to London itself. For the same reason the country between Liverpool and Bristol sometimes goes to Liverpool and sometimes to Bristol for its supplies of American flour, though its normal state is Liverpool-wards. Birmingham is the meeting place of the two tides of trade, and sometimes a glut in the Liverpool market will utterly overcome the normal Bristol tide and send a wave of products far beyond the meeting point; and so, sometimes Bristol is the aggressor.

In the counties to the south and west, Devon, Cornwall, Somerset, Bristol has a large and reliable market, though it very occasionally happens that London can compete, and in this way. Bristol has but one railroad to London, while Exeter to the south and west has two, and the competition between the two is active. It is stated that special rates are sometimes given and discriminating charges made that enable a London man to put flour down in Exeter cheaper than the Bristol merchant can, though the distance between the latter place and Exeter is one-third of the distance between London and Exeter. There seems to exist here in the minds of those in the flour trade a considerable difference of opinion as to whether this last mentioned state of affairs affects the flour market of Bristol at all, and I think the weight of opinion is to the effect that no serious inroads into Bristol's consuming district is made by differential railroad rates. An occasional cargo of flour is landed at Plymouth or Southampton, though seldom, so that Bristol has almost a clear field in the southwestern counties.

During the year 1882 there were imported into Bristol 19,600 tons of flour from foreign countries. An insignificant portion of this was French or Hungarian, imported for the use of the pastry bakers, and commanding a price far beyond the average. The remainder came from the United States, barring a small quantity from Canada. This import was not quite up to the average of former years, and an increase in the amount from the United States may reasonably be expected during the coming year.

Every pound of this United States flour came here by steamer; nearly all under the English flag; nearly all in the two regular steamship lines that ply between Bristol and New York; almost every pound was shipped at New York, and came in sacks, that being the mode preferable to the consumer here.

Most of this flour was sent on consignment to commission merchants in Bristol, experience having proved that this is by all means the most satisfactory mode of handling the stuff, both to seller and buyer. It is very evident, it seems to me, that a miller or New York merchant can do much better with his flour here by sending it to an agent who disseminates samples industriously among, say, fifty or seventy-five possible buyers than he can by endeavoring to build up a regular trade with one or two importing houses or large consumers. In point of fact there is little or no flour coming here from the United States to a regular customer, buying regularly at stated intervals. There is, to be sure

at least one large firm here which imports flour direct, but they have an agent or clerk in New York who buys according to the market, having an eye to ocean and inland freights. This is a simple transfer of the agent from Bristol to New York, and is added proof that the miller cannot deal as satisfactorily with the Bristol importer direct as through commission merchants. It frequently happens that the consignment to the commission merchant is a consignment practically direct to the consumer, who has ordered it of the commission merchant, who in turn cables the miller or the New York exporter. An American exporter oftentimes cables his agent here that he can sell a certain quantity of specified grade at such a price. It is often disposed of thus. In neither of the above cases, it is evident, can the flour be considered to be shipped on commission, for though it passes through the hands of the middleman on this side, it is ordered from here before shipment.

Millers away from seaboards in the United States are at a disadvantage compared with exporters and millers operating where ocean steamers can come. In the first place, there is added a greater element of uncertainty in the time of arrival at Bristol of the consignment. It is often of vital importance to the importer to have his flour with as little delay as possible, and he can calculate almost to a day the time of its arrival, if coming from a seaport town only. The importer here not only desires to eliminate from his calculations the uncertainty of combined railroad and steamship transportation, but he also wants to deal only with ocean freights. Despite the low rates which interior millers can often obtain on a through bill of lading, the importer here would rather buy in New York, and calculate only on the ocean freight.

It has sometimes happened that a consignment sent by some western miller to this port, through railroad delay, transshipment, &c., arrives here after the maturing of the seller's draft, thus depriving the importer of his interest for a few days. Of course this is very exceptionable, but it often happens that a consignment from New York will arrive, be sold, and paid for, before the maturing of the seller's draft. An importer naturally appreciates this little interest, and the further west he buys the more he cuts himself off from all chance of making it.

Commission merchants here tell me that American exporters of flour as a rule will seldom or never profit by the advice or suggestions sent from this side. If a man here does well with a consignment of flour, in spite of representations he makes as to the poor market to the exporter, he possibly receives another consignment, which he is compelled to sacrifice, and which would not have been sent had his advice been heeded. They say further that if they notify an American exporter that the market will stand, say 500 barrels of a certain grade, they are just as likely as not to receive twice or thrice the amount suggested, some of which is sacrificed. I have heard considerable comment on this disposition of American exporters to overdo, and of their consequent losses, and it would seem to me that if an American firm has an agent here who has proved himself trustworthy and reliable, his opinion should be regarded more than it now is. It is often said that small consignments are far more likely to do well than larger ones. By a small consignment I mean, say 500 barrels, but a first consignment should not be more than 50 or 100 barrels.

Having now set out what seems to be the best mode of getting the flour here, let me suggest as to its quality and the kind that will best suit the demand. The bulk of the flour used here is inferior as regards color, price, and quality. Bristol is improving, I am told, in its taste for flour, but even yet no such general market for a fine grade of flour ex-

ists as there is in Liverpool or London. There are many reasons for this, the principal one being that by far the greatest portion of the American flour is used mixed with English. It is evident that the moment our flour approaches in price the English product of equal excellence it is just as cheap to use the English flour unmixed, and that is what the bakers do. The millers here often find it cheaper to mix than to grind, and I am informed that there is no doubt that a considerable portion of the product of English mills is American flour under a new name. It is manifest that the English miller does not need too good a grade for this purpose. He wants a reasonably excellent flour, cheaper than his own.

Of course the gist of the matter is in the taste of the consumer, and as yet the price of the loaf is more of an object so him than the appearance or quality. The average consumer here, if selecting between two loaves, would buy the dark and heavy quartern he has been accustomed to at 13 cents rather than pay 14 cents for a lighter and more attractive-looking loaf. Moreover, it is considered here almost an act of suicide to eat fresh bread, and the loaf is seldom eaten until at least one day after baking. The English compact loaf stands the test of time far better than our finer American products and is more palatable, after the lapse of a day or more between baking and eating, than our loaf is.

English millers are naturally averse to American competition, and are sometimes able to interfere successfully with the trade, and in this wise: The bakers are generally debtors more or less large to the millers, and they are sometimes given to understand that purchase of American flour will result in financial pressure, a significant hint, generally appreciated.

A brand is no longer a guarantee. I am informed that any flour can be branded in America as desired by the importer on this side. The result is that everything is thoroughly tested by baking it up. Nothing else will be admitted as a test, and a loaf is baked out of every lot the quality of which it is desired to investigate.

I conclude with a verbatim copy of the words of a man thoroughly up in the Bristol trade and worthy of the highest regard. His opinion, or rather statement of facts, is indorsed by the entire flour trade and is highly important. He says: "The most serious objection to American flour is the irregularity of quality. Brands are introduced which find a good demand at a fair profit. Very frequently after the first few shipments the quality is allowed to decline. The reputation of the brand is spoiled, and before the confidence of buyers can be regained, a new brand must be introduced."

LORIN A. LATHROP,
Consul.

UNITED STATES CONSULATE,
Bristol, January 31, 1883.

AMERICAN PORK vs. FRENCH WINES AND LIQUORS.

REPORT BY CONSUL WILSON, OF NANTES.

I have the honor to transmit herewith a report on the subject of the prohibition of American pork in France. I have found certain evidence consisting of official communications and reports made by the chamber

of commerce of this city, which represents a large pork interest, to the minister of agriculture and commerce at Paris, which I consider to be newly discovered and highly valuable. It declares the inability of the French pork manufacturers to compete with the like industry of the United States. It charges their failures to the competition from the United States, and says plainly that if the administration does not desire the disappearance of this industry from France, it must aid the pork manufacturers by such action as will hinder if not prevent the (to them) detrimental importations from the United States.

I of course cannot know that it was in answer to these appeals that the minister issued the decree prohibiting the entry of American pork into France, but it is a fair subject for argument. If this was true it shows that the decree was passed more in the interest of the pork manufacturers than for the benefit of the public health. I do not say that the evidence I have herewith presented proves this conclusively, but it certainly tends that way. It shows the interested appeals for aid by the pork manufacturers.

If this evidence shall be as convincing to the Department as it has been to me, it will open with renewed vigor the question of reprisals, and, looking to that end, I am preparing a report on the falsification and adulteration of French wines and liquors which I had intended to have included in this. I will send it as a supplement.*

MEAT PRICES IN FRANCE.

The prices paid in France for meats for the table are much higher than in the United States. In Nantes, a city out of the current of tourists, the prices of meats are higher than in the markets of either New York, Philadelphia, or Washington.

I furnish the market-reports of November 10, 24, and December 1, for beef, veal, and mutton on foot; live-stock market.

Beef.—Average weight, 1,300 pounds; price, $97.50; per pound, 7.5 cents.

Veal.—Average weight, 140 pounds; price, $14.70; per pound, 10.5 cents.

Mutton.—Average weight, 100 pounds; price, $9; per pound, 9 cents.

Marche de la place Talensac—Abattoir.

Meat dressed and sold by the carcass or side:

		Cents.
Beef	per pound	12 to 16
Veal	do	14 to 17
Mutton	do	14 to 22
Pork	do	10 to 13

Retail butchers' shops.

		Cents.
Beef:		
Soup-joint	per pound	20
Boiling piece	do	20
Roasting piece	do	20 to 27
Steak	do	30 to 50
Veal	do	20 to 27
Mutton	do	22 to 30
Ham:		
French	do	35 to 38
English	do	38 to 50
Bacon	do	30 to 35

* It comes immediately after this report.

The business of meat dealer, butcher, &c., is one of the best in France, and it is said that a reasonably sharp and saving butcher expects to retire at the end of ten years or less, with a fortune of from two to three hundred thousand francs. This of course has to be paid by the consumer in the high prices charged.

These prices prevent the use of meat among the common and laboring classes as a regular article of diet as known and practiced in the United States.

This state of things might be corrected by the competition from importation, but France, as is well known, has seen fit to prevent competition so far as American pork is concerned by prohibiting its admission into the country on any terms; this on the *alleged* score of its *alleged* unhealthiness.

PROHIBITION OF AMERICAN PORK.

In this communication I propose to show some of the influences brought to bear to obtain and continue the decree of prohibition, and believe it will have an important bearing upon the action of the United States in respect thereof. The integrity of the French government in passing the decree is no wise questioned, but the evidence will show, I think, that there were influences brought to bear upon it and its representatives other than those interested for the public-health; influences in favor of the French hog; influences of self-interest endeavoring to procure prohibition, either directly by a decree, or by a tariff making importation impossible, and thus to save from ruin a French industry which acknowledges itself unable to support itself without state aid, or to successfully compete with a similar industry from the United States. The evidence will show that this even more than the health of the public was presented and used to obtain the decree.

PORK AS EATEN IN THE UNITED STATES AND FRANCE.

Some preliminary propositions concerning the latter, the health question, I desire to present, not discuss. They must be admitted; they cannot be denied.

1. American pork is no more liable or likely to contain trichina than that of any other country. The parasite is introduced into the live hog through his stomach, and with, or by means of, his food.

The opportunity for its introduction is quite as good in Europe as in America. A hog will be a hog, wherever he is raised. He does not receive in France that care and attention as to either his food or cleanliness, which will make him the superior of the American hog. The number of hogs in the United States cannot be much under 50,000,000; the principal portion of the pork produced therefrom is consumed at home, pork being one of the standard articles of diet of the people, and no cases of trichinosis are known in the entire country.

American pork is, in the United States, a cheap, healthful, and satisfactory food for the people.

If the same pork is not, or is reported to be not, equally healthful in France, the cause must be either the prejudice of the people, or their manner of cooking or eating the pork.

It is also true that the curing and preparation of pork for foreign markets in the great pork-packing establishments of the West is carried on with a care and attention not exceeded in the world, and which leaves nothing to be desired on the score of cleanliness or healthfulness.

The mass of the people in the United States bestow greater attention,

at greater expense, and are more fastidious as to the kind and quality of their food, than the same class in Europe.

Much food here used would be rejected in the United States.

2. The science and experience of all countries teach that the only danger from trichina in any pork arises from the savage and barbarous practice of eating it raw; that it is quite as safe as other meat when eaten as is other meat and as becomes civilized beings; that exposure to heat of 60° or 70° Centigrade, less than necessary for proper cooking, is amply sufficient to destroy all vitality in the trichina, and render the pork innocuous.

The French minister of agriculture and commerce declared this, and recommended it in his circular of February 14, 1881, four days before the decree of prohibition. It is reinforced by the latest French authority, report of the director of the municipal laboratory of Paris for 1882, p. 442, analysis of food and drinks. Uncooked and uncleaned pork stand together. A person uncivilized enough to eat pork raw is in, or may be in, danger from trichina. One who eats it uncleaned is in danger from the bristles.

Uncooked and uncleaned pork are equally unhealthy, and equally disgusting; trichina and bristles equally dangerous when the pork be eaten raw or dirty.

I have but little patience with a people who require the prohibition of *all* of a certain kind of meat in order to preserve themselves from maladies arising from eating it raw.

The civilized world will agree that there is squeamishness and caprice in the policy of a government which prevents its people from eating American pork, and yet permits its capital city of Paris to make a record of "meat consumed" during the past two years as follows: 1880, 9,012 horses, 307 asses, 32 mules; 1881, 9,273 horses, 349 asses, 31 mules.

HOW PROHIBITION WAS SECURED.

I now proceed with the evidence, heretofore mentioned, of the interested influences brought to bear to secure the decree of prohibition.

1. I find extending through the business community a general and widespread dislike and opposition to the American tariff, so far as it may affect any article exported from France, and a disposition to retaliate.

The report of Chamber of Commerce of Nantes for 1879, p. 14, on the subject of sardines, says:

> This industry demands that when the Americans strike our products with a duty of 50 per cent. *ad valorem*, and go with their salmon and other preserved fish to compete with our products, even to Australia, *that we should strike their products with an equal duty* on their entry into France.

The subject of the American tariff is fully considered in a communication set out at length in the report of the same chamber for 1878.

It was on the occasion of a meeting called to secure the influence of the same chamber in favor of the commercial treaty between France and the United States, well known in our country by the connection of M. Léon Chotteau therewith. The conclusion was against the treaty, because in the proposed tariff certain articles were to be admitted into France at a less rate than into the United States, notably silks, wines, brandies (spirits). They declare this inequality to be shocking and offensive ("l'inégalité la plus choquante organiseé au préjudice du travail français"), and conclude with the hope they will never (jamais) find an assembly which will impose it on the country.

2. This feeling of dislike and opposition is intensified by the situation in regard to American pork. Here is shown the willingness to retaliate.

The failure of the French pork trade because of the competition of the United States and the agitation of the subject of state or legislative interposition and aid, dates as early as 1877, four years before the decree.

The Chamber of Commerce of Nantes in its report for that year (p. 18, Part 1) complains to the minister of agriculture and commerce that, as to the bacon and pork for the navy, American pork received too much consideration and favor, and the home product not enough.

In the report proper (Appendix, pp. 18, 19) the pork industry is described as in a situation "deplorable."

The American bacon and lard are imported on such conditions as render competition on the part of our merchants nearly impossible.

The subject is continued in the report of the chamber for next year, 1879:

We have been repeatedly approached during the year 1879 by the pork and bacon merchants with complaints relative to the fatal consequences produced upon that industry by the insufficiency of the customs duty imposed upon American pork.

We have transmitted these complaints to the minister of commerce, insisting that they should be taken into serious consideration. Afterwards we addressed ourselves directly to the president of the tariff commission of the chamber of deputies.

The following is the letter written to him by us on November 6, 1879. This letter reviews and completes the observations we had submitted to the minister of commerce, July 18:

[The letter.]

NANTES, *November* 6, 1879.

MONSIEUR LE PRÉSIDENT. The attention of the Chamber of Commerce of Nantes has been brought frequently during several years to the prejudice which has resulted to our pork manufacturers from the tariff to which foreign importations of the same industry are subjected in France.

The origin of the crisis which has brought about the successive disappearance of our establishments goes back to the decree of October 5, 1854.

That decree provided for the admission in France of American pork on payment of a duty of 50 centimes per 100 kilograms (220 pounds), though the French pork had to bear a duty of 5 francs per 100 kilograms for the tax on the salt employed in its preparation. * * *

This state of things subsisted for a long time in spite of the protestations reiterated from the French pork manufacturers; and the anomaly of which they complained was never ended only by grace of the law of March 24, 1874, by which the duty on foreign pork was raised to 4.60 francs (92 cents). Unhappily the alleviation which should have been procured for our merchants by this return to a more equitable tariff was only momentary, and the situation has returned to its evil state.

The causes to which to attribute the present decadence of the pork industry are many, but we believe they are all founded on the competition with the pork made in the United States of America.

By the favor of nearly absolute freedom enjoyed by them during twenty years the importations have developed into proportions more and more grand, and when the tariff of 4.60 francs was established it had become impossible to divert this invasion of our market unless by more energetic means.

The stoppage produced by the law of March 21, 1874, was only momentary, as will be shown by the following table of the importation of salt pork and lard from the United States:

Our figures are extracted from the tables of general commerce of France; they represent the quantities consumed (special commerce).

Description.	1872.	1874.	1876.	1878.
Salt pork ..... Kilograms..	10, 229, 397	4, 079, 139	5, 269, 960	28, 102, 290
Grease and lard ..... do....	19, 162, 711	10, 676, 562	16, 865, 569	34, 725, 635
Total	29, 392, 108	14, 755, 701	22, 135, 559	62, 827, 925

This considerable progression in the importation of American bacon and lard sufficed to give birth to a crisis in our similar industry, but the conditions following which

were developed and the particular circumstances, of which we will say a few words, have greatly aggravated the effects:

The tariff of 4.60 francs which was laid upon American pork upon its entry into France represents scarcely, as we have said above, the tax on salt paid by our pork merchants (manufacturers) who found themselves in reality without any protection against the foreign competition.

Now to give the principal reason for the situation it will suffice to compare the price of sale in our own markets of the American products with the price (net cost) of French bacon and lard.

[Abstract taken June 30, 1878.]

	Francs.
American pork, price correct at Havre	104.00
Pickled pork made at Nantes	135.19
Loss	31.19
American lard, at Havre	99.00
Lard made at Nantes	139.00
Loss	40.00

We reproduce here these figures, Monsieur le Président, extracting them from a letter which was addressed to Monsieur la Ministre last 18 July, and of which we remit you a copy; they will suffice to explain the substitution of the foreign for national products in the domestic consumption of France.

Still the superior quality of French bacon and lard, and particularly those of our region, will be in the nature of a counterbalance, to a certain measure at least, to the bait of cheapness of similar products from America.

Our products were in great demand by the merchant marine; they made an object of regular exportation to the French colonies, and until lately many of our neighboring countries addressed themselves to our manufactories.

Actually the outlets to our trade are in a great part closed. The merchant marine has been itself subjected to a crisis of extreme rigor, and like everything else is condemned to the strictest economy. Our colonies, because of the tariff system which detaches them from their metropolis, import the American pork direct from that country, or else purchase, under the name of French pork, that which has nothing about it French but the brand.

As to the other foreign countries, it is, if possible, worst yet. Alarmed by the cases of trichinosis which had been pointed out to them, either in America or in the countries importing American pork, Italy, Portugal, and Greece have prohibited the entry of American pork, in any of its preparations, into their respective countries.

We communicate to you the text of the decision of those governments on this subject.

We will remark, Monsieur le Président, that Italy and Portugal have not stopped with the exclusion of American pork, but have at the same stroke excluded French pork, though it has never had a single case of the terrible malady from which the country is so willing, and has such good right, to preserve itself.

As far as concerns Greece, the proofs demanded touching the origin of all other than American pork, and the suspicion in that country, which only imports these meats for their own consumption, renders the importation of our manufacturers extremely difficult.

It follows from this aggregation of circumstances, Monsieur le Président, that our pork manufacturers see themselves in competition with the supply of American products, which is here made the more considerable, as the other markets commence to refuse the suspected meats.

The French market escapes us at the same time as foreign markets.

Then, unless the government and our parliamentary assemblies do not wish to aid in the disappearance of an industry as considerable as that of which we speak, it is indispensable that it, and they, should come to its aid by an alteration of the customs duties.

It belongs, therefore, to the commission of which you are the president to appreciate the observations which to you have been presented by the delegates from this industry, and which tend to the elevation of the customs duty to 35 francs ($7) per 100 kilograms upon American pork and lard. * * *

[Continuation of report, p. 43.]

It is possible that the distrust excited by the American meats may be impressed with a certain exaggeration, but it is nevertheless true that the facilities of introduction accorded by us to their preparations injures our manufactures in a sensible degree in our domestic markets, and stops their exportation to foreign markets.

These things constitute for the pork industry of France an exceptional situation, and, as we have written to the minister of commerce, October 31, it is regrettable that an industry, of which the interests are attached so intimately to agriculture and the public health, should see itself sacrificed to the profit of a commerce in suspected products, and rejected for that reason by the neighboring countries.

Another part of the same report for 1879, speaking directly to the minister of commerce, &c. (Appendix, p. 19), says on the subject of "salt pork for the Navy and merchant marine":

We can only repeat here what we said last year on the subject of this industry. The commercial outlets are nearly closed in France, because of the competition of the United States and by the distress of the merchant marine.

It will be vain for us to expect a foreign demand for an article which has failed in France. Our colonies are provisioned directly by the United States, and the European markets refuse in great part to receive any salt pork, in fear that it may be infected with trichina. America therefore causes our manufacturers a direct loss in substituting her products for our own in France and the French colonies, and an indirect loss in making them victims of the suspicions of which American pork is the object in Spain, Italy, and other countries. * * *

When the last of our manufacturers of salt pork shall have closed their doors, the administration will have lost the possibility of recourse to a co-operation of which the last war demonstrated the utility.

In the following year, 1880, the subject is again taken up by the Chamber of Commerce; and here let me remark that the reports of the chamber consists of two distinct parts—one a report to its members and the public of its doings during the past year; the other, a report to the minister of agriculture and Commerce, being a *résumé* of the past and recommendations for the coming year.

[Report for 1880, p. 37.]

We have renewed to the tariff commission of the Senate the observations which we submitted to the Chamber of Deputies, in the interests of the French pork manufacturers, the industry of whom is more and more menaced by the development of American pork.

[The letter.]

NANTES, *November* 18, 1880.

MONSIEUR LE PRESIDENT: The 6th of November, last year, we wrote to Monsieur le President of the tariff commission of the Chamber of Deputies, to call his attention to the deplorable situation of the pork industry.

We have the honor to transmit the text of that letter, which is inserted in the works of our Chamber of Commerce for 1879, p. 39.

We cannot, Monsieur le President, but maintain the observations which we have suggested concerning the decadence of an industry heretofore considerable in our region. This industry is menaced with complete annihilation by the competition of the United States of America.

In effect, the introduction into France of the American salt provisions under the duty of 4.60 f. has a continually increasing importance.

From 4,000,000 kilograms, figures of 1874, it has attained those of 28,000,000 kilograms in 1878, and the table of "commerce general of France" acknowledges for the year 1879 an importation of 31,784,913 kilograms of salt bacon from America. These figures are of the "commerce special," and consequently represent the salt provisions for consumption.

It belongs to the Parliament to fix the limits of the protection, which is the legitimate right of the French manufacturers, but it is important to remember that the actual duty of 4.60 f. which is imposed on the salt pork from America makes no protection for our manufacturers.

This tax is paid on French salt pork as well as on that coming from America, and represents the impost on the salt employed in the preparation of the French meats.

Referring again to our letter of November 6, 1879, &c.

[Continuation of report (to minister), appendix, p. 16.]

SALT PROVISIONS FOR THE ARMY AND NAVY.

The situation of our salt pork industry is in no wise ameliorated. In the French market our salt pork is subjected to the competition with similar products from America, and are rejected in other countries, which, refusing to receive the American bacon infected with trichina, refuse ours also, for the reason that they cannot distinguish by the eye the suspected meats, freely introduced into France whether for consumption or re-exportation.

The foregoing action of the Chamber of Commerce and the French pork manufacturers seems to have been legitimate, and, so far as appears, not a subject of complaint. It consisted of a declaration of failure on the part of the latter, an admission of their inability to compete with the United States, and an appeal for state aid in form of a protective tariff increasing the present by 800 per cent., which would be, and was intended doubtless to be, equivalent to prohibition.

While trichina was mentioned in those appeals, it is only incidentally, not as a reason for prohibition, no cases cited, and it is not pressed upon the attention of the minister of agriculture and commerce.

The manifestoes were addressed both to the minister and to the tariff commission, the latter having then under its consideration a complete revision of the French tariff, which culminated in the law and decree of May 8, 1881.

The commission and both Chambers remained deaf to all these appeals, decided in favor of cheap food for the people, made no change in the duties on American pork, and refused the desired aid to the French pork manufacturers.

The minister then took the matter in hand, and the result was the two decrees of February 14 and 18, 1881, the latter being the decree of prohibition.

What relation there may have been between the appeals of the French pork manufacturers, and what influence the demand for aid to prop up and save from ruin and disappearance a French industry may have had upon the passing of the decree of prohibition, I have no knowledge, but two things seem certain: (1) that these appeals for aid were made or communicated to the minister; (2) that the decree passed gave to the French pork manufacturers the desired state aid in a manner equally if not more effective than that of prohibitory tariff, which had been refused.

The circular of February 14, 1881, and the decree of prohibition four days after, February 18, are doubtless well known to the Department and need not be herein set forth, but as pieces of evidence they are valuable, for considered together and unexplained they are anomalous, if not contradictory.

The decree of prohibition having been passed, and the end of the French pork manufacturers attained to even a higher degree than they had asked in these communications, their only care now was to guard and protect the decree and its operations, the former from recission, the latter from infraction.

I continue my translation of evidence from the same Chamber of Commerce written just after the passing of the decree:

> Opening our eyes to the dangers to the public health, by the circulation of meats containing trichina, the government is interdicting their introduction into our country, yet the interdiction provides for no inspection of English meats. There is much to fear that the American products will continue to be imported, at least in a certain preparation, under the denomination of English products.
>
> It belongs to the administration to baffle and thwart these frauds.

Then follows in the same old vein an appeal to obtain for the Nantes pork manufacturers the contracts for supplying the army and navy with salt pork and bacon.

At the close of the year 1881, the Chamber of Commerce, recounting the affairs of the year to its members and to the public, reports the following concerning my subject (p. 102, report 1881):

> A decree dated February 18, 1881, rendered on the proposition of Monsieur Tirard, minister of agriculture and commerce, has prohibited the importation into France of salt pork coming from the United States of America.

This interdiction was moved because of the malady known under the name of trichinosis with which the meats of that country were attacked or suspected.

The measure in question became attenuated in the practice by the creation of special laboratories charged with the examination and verification of salt provisions presented on our frontier.

Finally, to complete and generalize, within the necessary limits, the institution of these laboratories, Monsieur le minister of commerce has presented November 26, 1881, a project for a law providing for microscopic inspection.

Monsieur Tirard having been replaced as minister of commerce by Monsieur Rouvier, this projected law has been withdrawn by the government. On that occasion we submitted to the minister the following observations:

NANTES, *December* 3, 1881.

MONSIEUR LE MINISTER: In the course of the session of November 21 last, Monsieur le President of the Chamber of Deputies communicated to his colleagues the text of a decree by the terms of which "was retired the project of a law relative to the establishment of a service of inspection of pork coming from foreign countries, * * * presented to the Chamber of Deputies November 5, 1881, by the minister of commerce and of finance." The public has interpreted the act as a prelude to the abrogation of the decree of February 18, 1881, which interdicted in all France the importation of pork (salted) coming from the United States of America.

The projected service of inspection has the double purpose to guard the public health against the consumption of unhealthy meats, and at the same time to give satisfaction to certain commercial interests to which the absolute prohibition of American pork causes prejudice.

We regret, Monsieur le Minister, that the greatest part, too much the greatest part, was made by or on behalf of that commercial interest aforesaid; for, as we have endeavored to show to you, the decree of February 18, 1881, responded also to serions and commendable interests.

Before the prohibition of salt pork from America was pronounced in France, it had already been prohibited in many European countries, notably in Germany, Italy, Spain, and Turkey.

At the same time that they interdicted American pork, they interdicted also French pork, not because it was considered as unhealthy (that was never suspected), but because France receiving pork from America, to change the barrels or the marks was easy, and sufficed to make an error as to the true place of its manufacture when sought to be imported into these countries.

To preserve themselves surely from American pork they felt themselves obliged to interdict also French pork.

The pork manufacturers of our neighborhood have, then, demanded of us, Monsieur le Ministre, to represent to the government the grievous situation in which they are placed. Competition at home with American pork exempt from the duties on salt—they scarcely pay that much customs duty—and chased from the foreign markets by the fear which is inspired by these same preparations, our people lose their opportunity in the foreign markets while the salt provisions imported from the United States to France are there consumed, which crushes the price of the French products.

In this juncture our fabricants must cease their work, and the closing of their manufactories will cause, or has caused, in this region much difficulty among our agricultural population. These things were known to and appreciated by your honorable predecessor.

It appears to us desirable, Monsieur le Ministre, before giving aid to the demands of, or in the interest of, the American pork manufacturers and importers, that the government render to itself an account of the conditions in which one of our national industries contests and competes for the furnishing of food for our country.

These conditions are truly painful. Then, when all the French products, and particularly all provisions imported to the United States of America, are subjected to an exaggerated and excessive customs duty, is it a good time to enlarge the French market in favor of analagous products which come from that country?

Some persons have invoked the interest of the consumer as a justification for the proposed anomaly. Certainly no one would dream of proposing anything against the interest of the consumer, but will it be well served by giving encouragement to some exotic preparations that the most part of the countries of Europe hold in suspicion, and the low price of which is definitely explained by their inferior quality?

We estimate and hope that such matters will not induce the administration to resign itself to the principle of "laisser faire," and that it will preserve our nation by means of its attentive control against the allurements of cheapness of an article dangerous to the public health. In the present case the government in accomplishing this role will hinder a little, without doubt, the commerce in American provisions, but the measure which it will take can never be equivalent to the excess of protection in America, and we have nothing to fear from the pretended reprisals which, some people say, the United States may contemplate against our commerce.

We come now to demand of you, Monsieur le Ministre, not to welcome or receive the attempts that have been or will be made to obtain the abrogation of the decree of 18th February, 1881.

The decree is, perhaps, susceptible of attenuations, and the projected law was prepared by your honorable predecessor to that end. Whatever measures may be taken by which its disposition will be replaced, the government will take account of the different national interests involved.

Those of the public health are here in accord with those of the French manufacturers and of the numerous workmen thus engaged, and also the interest of the agricultural classes.

These will not be sacrificed, we have confidence, neither on the complaint of certain importers of foreign provisions nor from the chimerical fear of reprisals, nor yet from illusory hopes of a treaty of commerce with the United States.

In the same report, speaking directly to the minister, the Chamber says (pp. 11, 12):

That the pork industry has not recovered from the situation *regrettable*, in which it has been placed for a long time by circumstances of divers natures. This situation would have been more unfavorable yet if the importation of American salt provisions had not been hindered or prevented by the measures of wise precaution to which the administration has had recourse for the preservation of the public health.

This ends the quotations, running through five years of reports, and ending only with that of last year, published last August.

To show the importance of the subject matter, I have tabulated the importations of American pork and lard from 1872 to 1881—now, thanks to the decree of prohibition, I suppose, entirely ceased.

From 1872 to 1878 I have to depend upon the statements of the Chamber of Commerce, pp. 15, 16, of this report.

I have no means of verifying this. The returns from 1879 to 1881 may possibly contain some fresh meat. The tableau general of commerce does give not them separate, but the amount of fresh meat imported into France from the United States is very little.

Years.	Pork.	Lard.	Value.
	Kilograms.	*Kilograms.*	*Francs.*
1872 to 1878	47, 680, 886	81, 430, 477	180, 204, 304
1879	32, 594, 184	37, 229, 104	77, 888, 074
1880	34, 720, 221	42, 105, 990	83, 194, 067
1881	17, 699, 249	37, 290, 559	65, 870, 780
Total	132, 694, 540	198, 056, 130	407, 057, 225

Eighty-one and a half millions of dollars represents the pork and lard commerce of the United States with France during the period above mentioned. The loss to the United States of this amount of French commerce is the effect and result of the decree of prohibition of February 18, 1881.

Thus is formulated in dollars and cents the complaint of the United States against France by reason of that decree.

The difference in price in favor of American pork and lard for the same period is stated, p. 16, by the Nantes Chamber of Commerce, at 31.69 francs per 100 kilograms of pork, and 40 francs per 100 kilograms of lard, so that—

Amounts.	Francs.	Dollars.
132,694,540 kilograms of pork, at 31.69 francs	42, 050, 899	8, 410, 179
198,056,130 kilograms of lard, at 40 francs	79, 222, 452	15, 844, 490
Total	121, 573, 351	24, 254, 669

These figures show at a glance the difference in price between the American pork and lard during the period mentioned and the same amount of French pork. American pork and lard during that time, by the amount aforesaid, and thus is formulated in francs (and dollars), the complaint of the French pork manufacturers.

This closes my evidence on this branch. It has been somewhat voluminous, but I have remembered, and have acted upon the rule of evidence which prohibits the introduction of a portion only, but requires the presentation of the entire document, so that no one can complain of unfairness in my having kept back any portion unfavorable to my side of the case.

These reports cover five years or more of time. There are many repetitions, but they are repetitions and reiterations of the objectionable argument, and prove beyond cavil the position of the Chamber of Commerce to have been inimical to the United States on the ground of self-interest, and that they sought to prevail upon the minister of agriculture and commerce to secure the intervention of the government in their behalf, which was finally done by his decree of prohibition, and with which they were satisfied.

A summary of their position was as follows: The French pork manufacturers were in a failing condition, threatening to close their doors and suspend business; that the prime cause of their failure was their inability to compete, either in France or her colonies, with American pork manufacturers, who could undersell them at from 30 to 40 francs per 100 kilograms; that the situation has become "deplorable," and unless they received aid or protection from the government which should hinder or prevent (entraver) the importation of pork and lard from the United States, their establishments must close, their workmen be discharged, and their industry disappear.

Whether these representations thus reiterated induced the minister to whom they were addressed to issue a decree of prohibition, I suppose not to be susceptible of proof.

It is significant, however, and suggestive, that while the aid and protection of a high tariff should not have been granted by the Parliament, which would thus seem to have acted in the interest of the consumers rather than in the interest of the pork manufacturers, that the same benefits should have been granted to the latter much more effectively by the minister of agriculture and commerce by his decree of prohibition, though he based it upon different ground.

The benefits thus granted were thankfully accepted by the pork manufacturers, and they became at once the most ardent advocates of the decree and the most strenuous opponents of its repeal, strengthening the minister in adhering to the decree, and advising him not to yield to intimidation by the United States under any (to them) apprehended threat of reprisal, nor yet that he should be beguiled by any illusory hopes of a commercial treaty.

The right of the French Government to pass the decree of prohibition of American pork and lard, and the remedy of the United States against it, are questions beyond the province of a consul to discuss, and I shall make no attempt.

The Chamber of Commerce suggests the possibility of reprisals as a remedy. It is not unknown to me that a retaliation has been proposed by a prohibition on the part of the United States of French wines and liquors, and reports have been made touching, their healthfulness, looking towards a prohibition on the same ground as the prohibition of American pork from France. If I were a statesman, as I am not, I should

not seek for any such articles as would afford the excuse of unhealthfulness to justify the prohibition, but would choose one without any such cause, and prohibit its importation, calling it a reprisal, and placing it squarely on the ground of retaliation for the unjust prohibition of an equally healthful article of food from the United States into France.

But as French wines and liquors have been so mentioned, and might with great propriety be chosen as proper subject for reprisals, I submit the annexed report as to their effect upon the public health and *morale* in France.

I content myself with reporting such facts as I may be able to gather, without attempting any elaboration of argument, leaving that entirely to the Department, but endeavoring to place in its possession the material necessary to enable it to arrive at a satisfactory conclusion.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, December 4, 1882.

ADULTERATION OF FRENCH WINES AND LIQUORS.

CONTINUATION OF CONSUL WILSON'S REPORT ON AMERICAN PORK VERSUS FRENCH WINES AND LIQUORS.

SECOND PART.

That the unjust prohibition of the importation of American pork into France, made, as it was, under the plea of public health, but in effect protecting French pork manufacturers, continued, as it has been, when every explanation and proof as to healthfulness and cleanliness has been made public, might be followed by a policy of reprisal by the United States Government against some article of French manufacture should not be unexpected.

The French have themselves suggested this possibility. (Chamber of Commerce, Nantes, 1881.)

This portion of this report is intended to deal with this question in its relation to French wines and liquors to show that they have been adulterated, have been made deleterious, if not poisonous, and as such exported to foreign countries, the United States among the rest; and if the policy of reprisal should be adopted, that French wines and liquors, as at present *manufactured*, would be a proper subject.

The evil effects of adulterated wines and liquors in France might be compared with those charged by France to trichinosis in American pork. The magnitude of the one and the insignificance of the other may be shown at a glance, and will be apparent on a moment's consideration.

Take the crimes perpetrated, the punishments inflicted, the deaths caused, the suicides committed, the insanity produced (quite as grave effects as can be attributed to any cause) by the consumption and use of wines and liquors in France only—waive the amount of unhappiness and misery caused, the degradation produced, the blasted hopes, the ruined families, because they cannot be calculated—take only those susceptible of being taken from the statistics of crime and compare these

with the entire number of cases of sickness or death arising from trichinosis caused by the consumption and use of American pork, and the difference becomes apparent at a glance.

CRIMES OF DRUNKENNESS IN FRANCE.

Evil effects in France only arising from the improper use of wines and liquors, compiled from the latest official reports taken for 1880, *or the yearly average.*

	Year.	Page.	Number.
1. Crimes committed while under the influence, waived because the statistics are not specific			
2. Accidental deaths	1880	205	449
3. Misdemeanors combined with and aggravated thereby; disorderly street rows in the night; fights	1880	25	785
4. Simple cases of excessive drunkenness; yearly average convictions since	1873	77	422
5. Suicides arising from excessive use; yearly average since	1875	.....	799
6. Insanity from alcoholism (I have not the exact figures, but it is 14 out of every 100 cases); yearly average cases	.....	104	455

These are the figures at the minimum, and from them it will be apparent at a glance that there are a greater number of cases in France in one hour, possibly in one minute, than there is of trichinosis in a year. The wider the comparison is extended the greater and more apparent becomes the difference. So that if the policy of reprisal shall be adopted by the United States and placed, as was the prohibition of pork in France, on the score of public health, the choice of wines and liquors as its subject would seem to be justified to such extent as that France could be estopped from making any complaint.

HOW WINES AND LIQUORS ARE ADULTERATED.

The successful adulteration of wines and liquors requires both the professional learning of the chemist and the technical knowledge and experience of the wine merchant.

Prohibited by law, rejected by the public when known, it will only be performed in secret and as one of the mysteries of the laboratory.

To discover and detect it in particular or specific cases requires professional knowledge of a high order, the possession of that sharpened, educated, or, rather, experienced taste which is almost equivalent to a sixth sense, and to these must be added the authority of the law by which private premises may be invaded and private property examined.

Few persons in France combine these qualifications, and I make no pretensions to be one of them. I shall not attempt to give private or secret information, nor to make specific or particular examinations.

Everybody knows, or says, that the wines and liquors of France are adulterated, and they deprecate it, but the consumption and use of the adulterated article goes on much the same as if no adulteration existed. I shall endeavor to give some information from statistics furnished by French authorities, and so not to be controverted, showing the extent to which this adulteration is carried, and in some slight degree its effect upon the people. It would be aside from my purpose to make, or allow to be made, any comparison of French liquors with those of the United States, or to assert that ours are better than theirs. Our liquors in our own country are our own affair. Not until we seek to introduce them into France will she have a right to complain of their quality or examine as to their purity. Because of this condition as against France I exercise this right and make this report.

FRENCH OPINION ON REPRISALS.

Other consuls have made reports on the same subject, and one of the leading journals in France in that interest, the Revue des Vins et Liqueurs, in its last number, has made these reports a subject of criticism in a long article entitled the "Hog and the Vine." In this article the questions put by the Department in its confidential dispatch to its consuls in France were quoted at length, and the whole subject of adulteration and reprisals argued from the standpoint of a French wine merchant.

Some of its admissions concerning adulteration and falsification of wines and liquors, coming with its authority, are valuable contributions to the side of its opponents. The editor advises naturally enough against reprisals by the United States. He says—

> These reprisals are of doubtful taste and it is never prudent to enter on this path. What, for instance, would the United States say, if, to their prohibition against wines, France replied by establishing an inspector against tinned meats, against grain cargoes No. 2, or cotton, products which the French and foreign trade, rightly or wrongly, accuse more or less justly of being adulterated by the American shippers.
>
> Were it not better, since the cause our friends sustain in demanding the abolition of the prohibitory inspection is a just one, to convince the French Government of its error, raise a movement of public opinion, and lastly have recourse to the regular means which their genius as a practical people may suggest to them.

Of course the policy of reprisal is not to be lightly entered upon, nor until the attempt "to convince the French Government of its error" been made and exhausted. This attempt has been continued for now nearly two years without any perceptible effect. How long would the Revue des Vins have it continue? And when all efforts have failed must it not end in reprisals as the means of redress? This has been admitted by the chamber of commerce of Nantes, and now again by the Revue des Vins.

If the Revue objects to wines and liquors being chosen as the subject of reprisals, it, and its friends of that interest, might act on its own advice: "Raise a movement of (French) public opinion and convince their own government of its error," secure the abolition of the pork prohibition, and thus prevent reprisals from either side.

The report of the consul at La Rochelle is noticed as follows, and it shows in some degree the offensiveness of the entire criticism:

> Alone, the *diatribe* of the consul at La Rochelle seems at first sight worthy of consideration, but we are obliged to challenge him on account of reasonable suspicion, for we believe we know him to be a native of Maine, and consequently a bigoted tee-totaller.

"*Diatribe*" is a hard word to apply to a report made by a United States consul to his government, but "let the galled jade wince."

The consul at La Rochelle needs no defense at my hands. He is well able to defend himself. Besides, that charge will do him no harm at his home and where he is known, and there none can be made which will do him harm.

I have cited this to enable me to discount any similar opposition which this report may meet, by saying in advance that I am in favor of temperance; that I am opposed to intemperance, and that I think it a dreadful evil, a crime justly punishable by law in France, entailing misery on its victims, unhappiness on their families and friends, filling the prisons, almshouses, and lunatic asylums, begetting a large portion of the necessity and the expense of criminal procedure in the State, and to be attacked and suppressed by any legitimate means which promises success. Is the Revue des Vins opposed to this? Does it favor intemperance?

Holding this belief, yet I am not a bigot, and am willing to agree that the wines of France, in their purity, are healthful, palatable, and agreeable, and that the southern portion of France, where there is more wine raised, either actually or proportionally, than in any country in the world, is, without any temperance society, one of the most temperate, having in proportion to its inhabitants fewer cases of drunkenness, of crime, of accidental death, of suicide, or insanity from the use of spirituous or alcoholic liquors than almost any other. If I were writing an article on temperance I would elaborate and prove this statement. I make this concession to the Revue des Vins, and close it by making my charge, *i. e.*, that the great curse and blight, and the one to be prevented, arises in France from the adulteration of wines and liquors otherwise pure, and the manufacture and doctoring of those inherently bad. Will not the Revue des Vins and the wine interest aid in its prevention, and, if so, are we not in accord?

A frequent response made to this charge, especially by French manufacturers to American importers or purchasers, is, that if the buyer will deal with only the best houses and is willing to pay for the best wines and liquors, he can always secure that which is pure, and will run no risk of getting adulterated or poisonous compounds. But this begs the whole question, for what should be required, and enforced, is that the wine merchant shall not be permitted to either make or sell those poisonous compounds, not even to those who from ignorance or cupidity might desire the cheaper article; that the drinker shall not be permitted to purchase, even though he may desire, poisonous compounds under the name of wine or liquors because he can get them at a low price. Least of all should the seller be allowed to sell them as pure. If there is demand for the adulterated, poisoned, or diluted liquors, let them be sold *as such*, and not represented and sold as pure.

A butcher will not be allowed to sell tainted meat, nor a baker bread made of alum, though they offer them never so cheap.

THE FAILURE OF THE WINE CROP IN FRANCE.

France is the greatest wine-producing country in the world. The total production and commerce in wine for 1882 amounted to 2,056,692,491 francs. One hundred years ago she produced 25,000,000 hectoliters. This increased in regular gradations until it culminated, in 1875, in 83,632,391 hectoliters. The average crop from 1870 to 1875 was 58,000,000 hectoliters.

In 1879 commenced seriously the ravages of the national plague—the phylloxera. Without study one cannot appreciate the extent of the ravages, nor the great damage this inflicted on France. In 1879–'80 it utterly destroyed 1,250,000 acres of full-bearing vines. It seriously damaged about 1,250,000 acres more. It reduced the wine crop to 25,000,000 hectoliters in 1879, being a loss of about 800,000,000 gallons, to say nothing of *Eaux-de-vie*, *Cognac*, &c.

In 1880 the wine crop reached but 29,000,000 hectoliters, in 1881 to about 38,000,000 hectoliters, and in the past year, 1882, the same, 38,000,000, being less than half a crop for the past four years, and entailing a yearly loss averaging 25,000,000 hectoliters.

However interesting, it would be foreign to this report to follow the various means taken for the extermination of this insect; to tell of the government commission, of the scientific examinations, of the syndicates formed among the owners, or of the methods adopted.

Isolated efforts were vain. General and united action was the only

hope for relief. The result shows such improvement as that we may hope the devastation has been stopped and the devastator conquered.

In her calamity, France has had the sympathy of all peoples, from none more than the United States, and in her efforts for redemption she has their encouragement. Had this failure happened to the grain crop, even for a single year, what distress and ruin would it not have caused? When continued for four successive harvests it would have produced a famine at which the world would have stood aghast. From such failures of its great crops of wheat, or corn, or cotton, the United States would not recover in a decade of years.

EFFECTS OF THE FAILURE OF THE VINE IN FRANCE?

On the wine-growers sad enough, doubtless, for they could neither raise their usual crop of grapes nor could they use the ground occupied by the vines to plant anything else; and their efforts for the extermination of the insect must have been very expensive. Great excitement it doubtless caused; attracted the attention of the government and of the world. Yet, this immense failure of from five hundred to eight hundred millions of gallons, continued year after year, has had no perceptible effect on the quantity of wine drank, the facility with which it can be obtained, nor the price to be paid for it.

The consumption of wine has maintained itself at about its average, diminished some years and increased others, but not more change than before the failure of 1879.

In Paris the average consumption of wine for each inhabitant amounted in 1877, to 212 liters; and in 1876, it was 230; and in 1878, 224 liters.

In the country it was, for 1876, 140 liters; 1877, 128; 1878, 124; 1879, 116 liters.

In the eight largest (octroi) cities of France the consumption of wine has diminished but 3½ per cent., while the consumption of alcohol has increased 31 per cent.

The average price of wine exported was as follows, for 1879 and 1881:

1879. Bordeaux wine, in barrels, per hectoliter, 115 to 130 francs; in bottles, per hectoliter, 150 francs; all other wines, in barrels, 50 francs; in bottles, 225 francs.

1881. Bordeaux wine, in barrels, per hectoliter, 140 to 145 francs; in bottles, 165 francs; all others, in barrels, 55 francs; in bottles, 225 francs.

This shows the slight increase of from $1 to $3 per 22 gallons; certainly not famine prices.

The exportations have maintained themselves about as has the consumption; fallen off slightly in some kinds, but increased in others.

The statistics will vary in the calculations of different persons, for the entries are varied under so many items. Wine, Bordeaux and other, in barrels, in bottles; Eaux-de-vie, Cognac, &c., all spirituous liquors under different names, and the statistics consequently susceptible of infinite variety.

The exportation, in francs shows an increase thus:

WINE.

	Francs.
1876	216,200,000
1877	225,500,000
1878	207,100,000
1879	264,900,000
1880	254,600,000
1881	264,200,000

OF WINES AND LIQUORS—TOTAL EXPORT.

	Francs.
1877	285,800,000
1881	332,300,000

The exportation, in quantity, is thus:

OF BORDEAUX WINE.

	Hectoliters.
1878	1,037,430
1881	1,165,575
Increase	128,145

OF OTHER WINES.

1878	1,707,974
1881	1,360,055
Decrease	347,919

Many of these statistics are given with accuracy and particularity in the tables appended to this report, and which I have taken from the tableau general of commerce for the respective years.

Here the round numbers were sufficient for my purpose, which was to show a decrease neither in consumption or exportation, nor that increase in price which usually follows failure of crops for even one year, but which, if continued for three or four, results in famine. How have the wine merchants of France been able to keep the supply equal to the demand?

How has this great feat been accomplished? The recuperative power of France after one year's war with Germany, and her ability to make the most out of the least, was at once the wonder and the admiration of the world, but in the case of failure of the wine crop she has shown unexpected recuperative power, and the ability to continue it for an indefinite period.

How has she been able to accomplish it? To solve this economic problem which so worried the Israelites during the last years of their sojourn in Egypt, to learn this secret of making something out of nothing and be able to follow their illustrious example, in case the United States should be unfortunate enough to lose its crops for continuous harvests, will surely be worth while.

How has this been accomplished?

Answer. They have imported in large quantities the cheap, heavy wines of Spain and Italy. They have imported raisins from Greece and Turkey, soaked them and expressed the juice, and to these bases they add alcohol, coloring matter, and water in all imaginable proportions, kinds, quantities, and degrees, and thus they manufacture what they call wine, sell for wine, and export to the United States for wine.

This is not the first time the above question has been asked.

In the Journal Official, the same paper, and on the same day in which was published the decree of the minister of agriculture and commerce against American pork, February 18, 1881, appear the debates in the senate of France on the subject of the new tariff.

The president of the tariff commission, Monsieur Pouyer-Quertier, made a speech in which he set forth the true condition of France and appealed to his colleagues to meet the tariff question fairly. He said, p. 133:

I have seen on the quays of Bordeaux, and I believe I can see the same to-day, a quantity of wines of Spain which had come to the borders of the Garonne. I asked or

the Bordelais if perchance these wines, worth only 80 to 85 francs per hectoliter, had not come to Bordeaux to breathe the air of Garonne and *be transformed into Medoc.*

These, perhaps, are the wines which come to-day from Spain, and which *after a certain cure are again exported.*

This represents a certain benefit, for we must admit that this wine contains alcohol to 15 degrees, and that with one barrel of *it and one of the water of the Garonne they make two barrels of wine.*

The minister of agriculture and commerce, who had that day signed the prohibition against American pork, replied:

I remark to the Hon. M. Pouyer-Quertier that it is a singular fashion to defend the industries of a great country like France to come here and tell à *propos* of our wines of the *mélanges* which are made with the water, the mixing * * * (protestations from divers benches). [Several senators: "All the world answer it."] Monsieur le ministre, continuing: * * * and to come here, *to thus discredit, in this tribune, the French products destined for foreign countries.* In truth, it is *a singular fashion for him to proceed* (more interruptions). You understand that since two or three years, either from phylloxera, from frost, or from dropping of the fruit, we have descended from an annual production of 60,000,000 hectoliters to 28,000,000. It is incontestable that we have not produced the same quantity of wine, and *although we may add water*, it is still necessary to seek in foreign countries that which we have lost. We introduce the wines because they are necessary to our people. In 1876, and before, we imported no wines, because our harvest was abundant and we had no need of them.

This is enough for my purpose. I need follow him no further. It is a confession of my charge, made by the highest authority in the state, and was in answer to the direct question.

INCREASE OF WINE IMPORTATIONS.

For specific information I refer to the tables in the appendix. I only give here general results.

We have seen that in 1876, and before, no *wine* was imported.

Years.	Wine only.	Wine and liquor, total importations.
	Francs.	*Francs.*
1877	34, 800, 000	54, 506, 000
1878	64, 400, 000	88, 279, 000
1879	126, 700, 000	155, 760, 000
1880	320, 900, 000	359, 791, 000
1881	375, 700, 000	410, 004, 000

Total *increase* in all kinds of wines and liquors since 1878, 6,342,510 hectoliters and 315,807,121 francs. *Increase in vin ordinaire alone* since 1878, 6,179,028 hectoliters and 296,312,280 francs.

The total importations of *vin ordinaire in casks*—I do not speak of bottled wine; it would not be used for adulteration or manufacture—for the year 1881 amounted to 7,700,000 hectoliters, valued at 346,516,000 francs. Of this, 7,274,206 hectoliters came from Spain and Italy, valued at 336,271,447 francs, being an increase over 1878 of 5,731,000 hectoliters and 262,000,000 francs.

In the mean time the exports of wine from France to Spain and Italy decreased 3,000 hectoliters.

By what might be called a remarkable coincidence, this great increase in importation arrived principally at the port of Bordeaux. In 1881 the importations of wine and spirits at that port amounted to 2,942,272 hectoliters, at 97,028,137 francs, which had been an increase over 1878 of 2,785,000 hectoliters and 87,404,958 francs.

The exportations from Bordeaux did not keep pace with this enormous increase in importation. The wine exported was, in 1878, 1,151,000 hec-

toliters, at 92,000,000 francs; in 1881, 1,173,000 hectoliters, at 135,000,000 francs, being an increase of only 22,000 hectoliters, but of 42,000,000 francs.

Of *spirits* there was a decrease of 23,000 hectoliters and an increase of 5,000,000 francs, the aggregate being a decrease of 1,300 hectoliters but an increase of 47,000,000 francs.

In 1881 the importation of raisins (dry) amounted to 68,000,000 kilograms, at a value of 37,500,000 francs, of which Greece and Turkey furnished 58,500,000 kilograms.

Raisins mashed or bruised in casks amounted the same year to 431,000 liters, at 64,000 francs.

The wine produced from raisins in France in 1881 is stated at 2,430,000 hectoliters.

These facts explain how the deficit caused by the failure of the wine crop has been made up. Thus, the Tableau Général of the commerce (special) of France for 1881, the last one issued, shows:

Description.	Hectoliters.	Francs.
Importations of wine	7,883,807	363,923,855
Exportation of wine	2,572,196	252,815,691
"Marchandises étrangères nécessaires à la consommation française"	5,266,711	111,107,794

France has the reputation of being a wine-exporting country, but this table shows that she is a larger importer than exporter; that the balance of trade against her on wine is no less than 137,000,000 gallons, valued at 111,000,000 francs.

The importation of wine from Spain and Italy amounted in 1881 to 7,700,000 hectoliters. It would not be fair to say this was all used, or to be used, in the manufacture of French wine—"to breathe the air of the Garonne and be transformed into Medoc." For though the bottled wine, amounting to 345,000 quarts or liters, has been excluded, yet it would include the Sherry and Malaga wine in casks. But it would be fair to say that the increased importation was for that purpose.

This increase from 1878 to 1881 of *vin ordinaire* only, in casks, amounted to 6,179,028 hectoliters, wines made from rasins, 2,430,000 hectoliters; total, 8,609,028 hectoliters. According to Pouyer-Quertier they add an equal quantity of water, 8,609,028 hectoliters, making 17,218,056 hectoliters, or about 460 millions gallons added during the year 1881 to the wine crop of France by manufacturing process.

The foregoing statistics do not prove, I admit, *all* this imported wine to have been "manufactured" into French wine, but I have said this transformation was one of the secrets of the laboratory, and not to be discovered by ordinary means. What wine merchant from France, or anywhere else, would furnish information, much less proof, that his French wine had been by himself or by any one else manufactured, doctored, or diluted from Spanish, Italian, or raisin wine?

One who demands specific proof of this shows that he does not desire nor intend to be convinced.

I have shown enough to raise a presumption of its wholesale manufacture.

I have shown (1) the failure of the crop sufficient to produce a famine; (2) no diminution in either consumption or exportation; (3) no corresponding increase in price; (4) an immense increase in importation of the (known to be) heavy wines of Spain and Italy, and (5) the entire

making of the crop of raisin wine, the two latter being in sufficient quantities in the aggregate to make good the deficit; (6) that the charge of this wholesale manufacture was made publicly in the Senate of France, and several senators shouted in support of it that "all the world knew it to be so"; (7) the minister of agriculture and commerce, replying to the senator, did not deny the charge, but upbraided the senator for making it, and said if it was true it had its justification.

These are, I think, enough to create the presumption and put the onus on the wine merchants.

The adulteration of wine naturally belongs to "ways that are dark and tricks that are vain," and it is not possible that the proof can be obtained and made clear, as in many other offenses against the law.

Recognizing this fact, the law of France, C. P., Art. 423, makes the mere *having, with intent to sell,* any adulterated or falsified food, medicine or drink, an offense equal to that of the adulteration or falsification.

I have said that the criticism of the consular reports of the Revue des Vins contained some important admissions bearing on this subject. In reading this, forget not that they come from the highest representative of the wine interest in France, and are contained in its reply to similar charges made by other consuls. It says, November, 1882, p. 881: "It is certain that there is made in France *a considerable quantity of adulterated wines*, although the last crop yielded 38,000,000 hectoliters.

"One estimates the production of raisin wines at 2,400,000 hectoliters. That a portion of this goes to the United States is possible, even probable, though in our opinion the proportion is very small.

"It is purely a question of price. As to brandies, we do not deny that it is possible there are brandies shipped that have very *little connection with the wine from which they are supposed to proceed.*"

On page 668 it gives the wine product of 1881 at 38,000,000 hectoliters, and then says: "This is only wine from grapes, but beyond this genuine wine-growers have made 2,000,000 hectoliters of artificial wine by pouring sugared water on the residue." Here let me repeat a story told by the newspapers *à propos*. A wine-grower sold three-fourths of his crop and then filled up the casks with sweetened water. His neighbor twitted him that the *mélange* was not wine. "Why not?" demanded he, "il tache le linge"—"it will stain the table-cloth."

It seems to be considered as wine through all its dilutions and ablutions while it will continue "*tacher le linge.*"

The Revue, same page, gives thus the total production of wine for 1881, as follows:

	Francs.
Natural wine, 38,000,000 hectoliters, valued at	1,540,000,000
Production of wine from sugar and water	80,000,000
Production of wine from dry grapes	48,000,000
Importations	192,629,749
Total	1,860,627,749

FALSIFICATION OF FRENCH WINES FOR THE UNITED STATES.

One of the consuls of France in the United States, I believe at San Francisco, sent a report to his government concerning the falsification of French wines imported into the United States. This report was deemed of sufficient importance to be made the basis of communications between the ministers of foreign affairs and of commerce, and by the latter to the Chambers of Commerce at Rheims and Bordeaux. The two

former I have not seen, but the latter is published in the Revue des Vins:

MINISTRY OF COMMERCE,
Paris, August 29, 1882.

MONSIEUR LE PRESIDENT: It appears from a communication which has been made to me through the ministry of foreign affairs that the imports of champagne wines into the United States, from 123,574 baskets during the first six months of 1881 have fallen to 104,755 during the corresponding six months of the current year, a diminution of 28,219. This result, according to American papers, is due not only to the competition of California wines, but is also due to the bad quality of the articles imported into the United States by our manufacturers of champagne, who, after having made a mark appreciated by the public, only send wines of an inferior quality.

Under these circumstances consumers fall back on imitations, which are not much worse than the imported article and cost less.

The same remarks would apply, though in a less degree, to the wines of all growths.

As to the California wines, it is considered that the white wines especially are improving in quality.

The red wines, notwithstanding the peculiar taste due to the soil or the process of manufacture, are preferred by many to the Bordeaux wines, called cargo wines, which are of middling quality and relatively high price. * * *

The minister du commerce,

PIERRE LEGRAND.

I have nothing to do with the quarrel which grew out of this communication in Rheims, nor yet with the champagne wines to which it refers, but as to Bordeaux the Revue explains, p. 670:

The part of the circular relative to Bordeaux wines is partly (well) founded, as cargo wines can no longer be shipped at same prices as before for similar qualities, owing to bad crops and the phylloxera, which would have no sense if referring to champagne wines.

The Belgian Government has taken substantially the same view I have tried to present, and has attempted in some degree to provide a remedy by a bill introduced on March 24, 1882, by the minister of finance, under the title of "Excise duties on the fabrications of wines from dried fruits." It was a blow aimed at all manufactured wines.

Monsieur Girard, director of the "Laboratoire municipal" at Paris, of which I shall have occasion to speak further on, commenting on this subject of adulteration of wines, says, in his report for 1881, just published, p. 40:

Fraud alone, fraud on a vast scale, furnishes the key to this enigma. It is by the illicit operations that certain manufacturers (or dealers) come to make their fortune at the expense of the public health, at the expense of the interest of the state and its cities, at the expense of the agricultural and commercial prosperity of France.

THE MANUFACTURE OF WINE—ITS FALSIFICATION AND ADULTERATION.

Wine, properly defined, is that alcoholic liquor which results from the fermentation of the juice of fresh grapes.

Falsification or adulteration is the addition of any substance which changes the composition of the natural wine.

A French chemist once said:

Wine is a mixture of alcohol and sugar and water; but, added he, mixing alcohol and sugar and water will not make wine.

He who supposes that the juice of the grape is wine, or that by letting it ferment it will always make wine, is much mistaken. As well might he say that to open the throttle-valve of a locomotive a given distance, it would make the run between two cities or stations by itself.

Both the grapes and wines have their maladies and their peculiarities,

which sometimes are intricate and unmanageable, and need the utmost care and attention.

After the juice has been expressed, and in the cask, the most difficult and delicate portion of the task begins.

To make good and palatable wine, keeping it pure and healthful, and to do this continuously, without loss, is as much a trade or profession as any. To do it well requires aptitude, study, and patient, intelligent labor, long continued.

The palate must be educated to the same degree of fineness as is required by a singer of his voice, or by a musician of his ear.

I give all credit to the honest wine-makers.

What I condemn are the wine falsificators—those who make unhealthy and impure wine by unlawful and improper means.

Wine has been falsified and adulterated in all ages, but until twenty years ago it was done so clumsily that its detection was easy. Most wine-dealers would detect it by the taste, or, if not, at the expense of a piece of cream of tartar.

All this has been changed. Now the falsificators profit by and make use of all the progress of modern chemistry, and the art of making wine without the juice of the grape has attained such a degree of perfection and skill that experts, epicures, and chemists alike are baffled and hesitate before pronouncing.

Monsieur Girard, director of the Laboratoire Municipal at Paris, probably the foremost authority in Europe, or the world, who denounces adulteration, in his last report (for 1881), p. 93, follows the same line I have pursued concerning the importation of Spanish and Italian wines, and gives a table, such as mine, showing the progression from 1875 to the first nine months of 1881, and then says:

These wines, rich in alcohol and extracts, are mixed with inferior, in an operation called *coupage*.

The *coupage* practiced by honest dealers who sell their wines for what they are, is perfectly lawful, for their aim is to ameliorate and render proper for consumption those wines which cannot be easily utilized as they are.

Unhappily, the greater part of the heavy wines of Spain, Italy, and the south of France serve for a *coupage* in which water takes a large place; this operation takes the name of *mouillage*, and is the plague of the commerce in wines.

The syndicate of wholesale wine and liquor merchants of France have energetically demanded its repression. (Session of June 16, 1881, p. 66.) Generally the *mouillage* is not made alone. Those who practice it almost always find themselves compelled to further in their fraudulent operations. The water is clear; when they add too much go to the wine it weakens the color so that it is perceptible, which, in its turn, must be corrected by the addition of heavy wines or some of the many coloring matters used for that purpose.

After attempting to pass a large quantity of water under the name of wine, they add to the *mouillage* the alcohol, of an inferior quality, of potatoes or beets, which contains alcohol *amylique*, which produces a drunkenness far worse than that produced by the alcohol of wine. These, with all their ramifications, are not the only falsifications; the body, the aroma, the bouquet of the finest qualities of grand wines, are imitated on a large scale by scientific processes. * * *

The ethers, *œnanthique*, *pélargonique*, &c., of the wine, are counterfeited by the mixing of other ethers and essences which are prepared artificially.

The report of the "Commission Supérieure de l'Exposition de Vienne," vol. 1, p. 289, tells of the institute at Klosterneuberg, Austria, where they make the extracts or ethers *œnanthiques*, which reproduce the bouquets of the most renowned wines.

The fabrication of *piquettes* (poor sour wine) from dried fruits or raisins has still more complicated the problem; these *piquettes*, cut with one-half or two-thirds of red wine from the south of France or Spain, whipped and filtered, constitute the heavy merchantable wine which can be mixed with light wines, or, more frequently, with water. The *piquette* has completed the means of action for the falsificator; it gives him the extracts, tartaric acid, tannin, glycerine, &c., which before he had not been able to procure.

Each day the chemist is met by new difficulties; he is obliged to labor without cessation to perfect his methods to combat those who dishonor science by using her to perpetrate frauds.

I have said that I had introduced enough proof to raise a presumption of a wholesale adulteration of wine in France and to put the *onus* of explanation on her wine merchants and distillers.

This last piece of testimony confirms and makes positive the charge against them. All that now remains to establish their guilt and complete this trial is to catch them in the act, which I now propose to do.

CONVICTIONS FOR ADULTERATIONS.

The offense proven the law of France is very stringent against all deceit, fraud, adulteration, or misrepresentation as to anything sold. Article 423, Code Pénal, provides: whoever shall cheat or deceive a buyer as to the title, &c., or as to the nature, &c., or (by false weights or measures) as to the quantities of anything sold, shall be punished, &c. Law of March 27, 1855: whoever falsifies or adulterates provisions or medicines, or sells or attempts to sell what has been falsified or adulterated, shall be punished, &c. The fine is to be not less than 50 francs, the imprisonment from three months to one year. If the adulteration consists of anything unhealthy, the fine shall not be less than 150 francs and the imprisonment may be two years. For second offense, double maximum punishment. The articles sold are to be confiscated, and, if not unhealthy, given to the bureau of charity; if unhealthy, destroyed, all false weights and measures to be broken. (Law of May 5, 1855.) The The former laws are made applicable to all drinks.

What has been the operation of this law? There have been convicted as follows:

	Yearly average of convictions.
1851 to 1855	6,780
1856 to 1860	8,442
1861 to 1865	4,695
1866 to 1870	3,014
1871 to 1875	3,209
1876 to 1880	3,398

These have not all been condemned for adulteration of wines and liquors, nor yet for drinks, for it includes the adulteration and falsification of food and medicines as well as drink.

The adulteration of these articles is determined by analysis, and each department has its conseil of hygiene which has control thereof. When a case is reported by the conseil or any of the inspectors, after analysis, the prosecuting officer of the republic takes it before the court. Consequently the action is spasmodic, being determined by each department for itself.

The department of Loire Inférieure became interested in the matter of adulteration of wine and liquors through the action of some of its influential citizens, more especially the doctors of medicine, who reported many cases of sickness which presented curious and unaccountable phases, from causes apparently undiscoverable, until their attention was attracted to the quality of the wine used at table and for daily drink.

This interest culminated in a general inspection, in 1876, of the restaurants and other places where wines and liquors were sold. This inspection was principally for wines colored with *fuchsine*, it being known or determined that no combination of that article but was poisonous. The result of that inspection was as follows:

Number of establishments inspected	300
Number of establishments seized	60
Number of hectoliters confiscated	3,307

All being wine fuchsine.

This wholesale confiscation satisfied the people and the authorities, and frightened the wine dealers, so that no steps have been taken in that direction in a public or general way since.

These wines were largely wines coming from Spain; some of them were mixed with French wines, but they point with creditable pride to the fact that but one case was of Bordeaux wine. If this practice prevailed in Spain to the extent indicated in the year 1876, when the harvest of wine was good and before there was any extensive importation of wine from Spain, what may we not expect it to be now after four years of failure, when the imports have increased as heretofore shown, and when Bordeaux has so changed as now to be the great receiving depot of Spanish wine, where it comes "to breathe the air of the Garonne and be transformed into Medoc"?

What may have been the action in other cities, except Paris, I have no means of finding out.

ANALYZATION OF FOODS AND LIQUORS IN PARIS.

In Paris there has been established the Laboratoire Municipal, a city laboratory which has been in operation since March, 1881. It operates only for Paris. It receives and analyzes any article of food, medicine, or drink, requiring pay in certain cases, and without in certain others. As this establishment has met much approval, it has been recommended by several consuls for adoption in the United States, in which I heartily join, I may be pardoned for a short description.

PERSONNEL.

	Francs.
1 chief, salary	6,000
1 subchief	4,500
1 chemist, first class	2,400
3 aids, second class	5,400
8 experts, inspectors first class	19,200
8 experts, inspectors second class	14,400
3 laborers	4,500
Material used	20,000
Expense for one year	76,400

RECEIPTS.

The paid analyses were	6,200
Fees paid into court in cases of conviction	10,815
Total	17,015

There were received 6,251 samples (in 1881), from which were made 37,506 trials or analyses. The cost of each sample was 10 francs. The cost of each analysis was 1.69 francs. The money received (as above) reduced these costs, respectively, to 7.49 and 1.25 francs.

The operations of the bureau are purely scientific and advisory. It institutes no prosecutions. It makes its examinations and reports the results to those authorized by law to act. It inspects premises and analyzes samples therein found, or which may be brought to it by private persons or by the police.

The operations for the ten months of 1881 were as follows:

Number of inspections made.

Markets	3,869
Restaurants, wine and liquor merchants, creameries and milk shops	10,698
Salt meat shops	522
Bakers, pie and cake shops	830
Grocers and fruit stands	4,461
Breweries and cafés	4,275
Total visits	24,655

Samples presented for analysis.

By the public:	
Paid for	378
Gratis	3,958
By the police and inspectors	2,181
Total	6,517

Of the above 24,655 visits, the inspectors made 394 destructions of articles manifestly damaged and unfit for use.

Result of the analyses of ten months, 1881.

Description.	Good.	Passable.	Bad.		Total.
			But not poison.	Poison.	
Wine	357	1 093	1,709	202	3,361
Vinegar	22	31	26	1	80
Beer	48	10	29	1	88
Cider	6	10	30	9	55
Sirup, liquors	40	32	53	9	134
Water	18	11	.....	63	92
Milk and cream	318	177	542	.....	1,037
Butter and cheese	30	12	29	.....	71
Bread, pies, and cake	45	13	11	.....	69
Meats, salt	55	10	21	.....	86
Preserves	39	7	.....	25	71
Salt, pepper, spices	45	13	82	.....	140
Coffee, tea, chicory	37	7	7	.....	51
Chocolate	26	24	33	.....	83
Cooking utensils	85	10	.....	45	140
Divers	394	63	36	*207	700
Totals	1,565	1,523	2,698	562	6,258

*Principally articles of perfumery.

Proportion of samples found "bad" out of each 100 *analyzed.*

	Per cent.
Wine	59.17
Milk	50.66
All	50.43

The manner of procedure would be foreign to this report, however interesting it might be, and would extend it beyond bounds. I have given the foregoing in detail that the workings of the laboratory in its cost and its effects upon the public health may be appreciated. The operations for 1882 will be given with less detail.

I am not able to give either the number of prosecutions, convictions, confiscations, or destructions for 1881.

OPERATIONS FOR 1882.

Aggregate of samples analyzed		11,000
Of wine only (December estimated):		
Good		888
Passable		1,603
Bad:		
Not poison	2,208	
Poison	413	
		2,621
Total		5,112
Proportion bad, 50 per cent.		

OPERATIONS FOR SIX MONTHS.

(*From June to December*, 1882.)

Establishments visited	20,765
Captures made	3,211
Destructions performed	99

Result of analyses of all samples.

Good		1,290
Passable		1,510
Bad:		
Not poison	2,309	
Poison	977	
		3,286
Total analyses for six months		6,086
Proportion bad, 54 per cent.		

The Laboratoire municipal is not charged with the prosecution of the offenders it discovers. It only reports them to the prosecuting officers of the law. It consequently has no record of convictions; but in a private interview the director announced that they had reported during 1882 to the procureur de la Republique 4,000 cases, of which prosecutions had been instituted against about 2,000 offenders, *of whom only two were acquitted.*

It may not be fair to say that 50 per cent. of all wine in commerce is bad because that per cent. proved bad on analysis, for it is probably only the suspected wines which are sent for analysis.

The truth is bad enough without exaggeration, and it is enough that there should have been sold or offered for sale in Paris in the past year, to 2,621 unsuspecting people, wine that was bad, and of which in 413 instances it was dangerous to health.

But I venture to say that the greater proportion of these samples of suspected wines are of the class of cheap wines to be found in every-day use at the restaurants and cafés and among the people. So that, as there is more cheap wine than high-priced, if there were a compulsory analysis of *all* the wines in use, the proportion of "bad" as above given might be maintained.

I do not even suggest, though I have no means of knowing, that the high-priced wines would not stand the analysis. I think, at least hope, they would. The wine-maker and wine merchant are interested in preserving *them* in their purity. When red wines of 1881 can be sold by the lot of 20 casks at 5,500 francs per cask, and white wines same year at 4,000 francs, as was done at Bordeaux this season, the dealer cannot afford to have *them* tampered with.

If purchasers should find themselves deceived but once, they would reject it entirely.

EFFECTS OF CONSUMPTION OF WINES AND LIQUORS.

The following table gives (by sections) the average yearly consumption (1) of wine, (2) of alcohol, of (3) the proportion of cases of drunkenness in each section of France:

Section of France.	Average yearly consumption of wine for each inhabitant, 1873.*	Average yearly consumption of alcohol for each inhabitant.†	Proportion of cases of drunkenness.†
	Liters.	*Liters.*	
1. North wine district	87	5.61	34
2. Northwest wine district	14	4.40	29
3. Northeast wine district	126	2.40	10
4. Center wine district	118	1.53	9
5. Southwest wine district	165	0.87	5
6. Southeast wine district	168	1.07	9
7. South wine district	190	1.19	4
Average for all France	119	2.84	100

* Dr. Lunier. Production and Consumption of Alcoholic Liquors in France, 1877, p. 94.
† Report of Minister of Justice, 1826 to 1880.

I call attention to the differences in the foregoing table between the districts which grow wine and those which do not.

Drunkenness in public was not punished as an offense until the law of 1873.*

CONVICTIONS.

1873	59,347
1874	86,418
1875	98,482
1876	91,560
1877	84,893
1878	71,972
1879	65,989
1880	60,714
Total for the eight years	619,375
Average annual	77,422
Drunk and disorderly, 1880	25,785

The minister of justice, in his report for 1826 to 1880, devotes a chapter or section to drunkenness, one to accidental deaths, and one to suicides, with a reference to insanity, and the deductions from the one to the other as cause and effect are as follows:

While the number of cases of drunkenness have decreased from 98,000 in 1875 to 60,000 in 1880, a falling off of nearly 40 per cent., yet the number of cases of *suicides from alcoholism has increased* since 1836, 483 per cent., nearly quadruple, while suicides from mental alienation have increased only 188 per cent.

Accidental deaths have remained at the same per cent.

Insanity from *alcoholism* has *increased* from 7 per cent. (7 cases out of each 100) to 14 per cent., and, strange to relate, suicides from crossed love have been reduced from 11 to 4 per cent.

* Report of minister of justice, 1826 to 1880.

Whether this increase in the evil effects of intemperance is attributable to the use of drugs in the wines and liquors or to a change in the habit of drinking, is a subject for the examination of the political economist and the labors of the philanthropist. It may have been the result of both. It is quite enough for my purpose that adulteration shall have contributed its share.

CONCLUSION.

It will not be supposed that I have made the examinations and expended the time and labor necessary for the preparation of this without having some opinions.

On the subject of reprisals, however, I offer none. I have endeavored only to procure the evidence and present the facts, leaving the decision thereof entirely to those having proper authority.

On the subject of adulteration of wines and liquors, I would recommend, the establishment of a chemical laboratory at New York, or any chief city of importation of wines and liquors, similar to that in Paris.

Analyze all wines and liquors by proper tests; provide as a system of rewards and punishments a graduation of duties, lower for pure wines, higher for passable, and confiscation for all others; those poisonous to be destroyed, and those not poisonous to be rectified if possible and sold, and the proceeds divided as in other cases of confiscated goods.

Let the laboratory be used by the people gratuitously for the testing of all articles of food, drink, or medicine suspected to be adulterated. While the United States Government might not desire to attempt any punishment for the adulteration, preferring to leave that for the State governments, yet I believe the knowledge that such tests could be accurately made would be such a satisfaction to the consumer and such a terror to the adulterator, thus acting as a preventive of crime, that it would be a good investment and more than justify the expenditure. It would also act as an incentive to the State governments by showing to what extent the evil existed.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, January 10, 1883.

APPENDIX I.

The wine product of France.

	Hectoliters.
1788	25,000,000
1840	45,486
1850*	45,266
1860	39,558,450
1870	53,537,942
1875	83,632,391
1877	56,405,363
1878	48,720,553
1879†	25,769,532
1880†	29,677,472

The average product—

	Hectoliters.
From 1866 to 1870	55,562,046
From 1871 to 1875	58,032,074
From 1876 to 1880	40,483,937

*1854 and 1855 were failures, producing only ten and fifteen million hectoliters.
†Failures.

Average annual product of Europe.

	Hectoliters.
France	51,359,352
Italy	29,000,000
Spain	16,000,000
Portugal	4,000,000
Austria-Hungary	22,640,000
Germany	6,501,000
Switzerland	900,000
Russia and Turkey, Europe	2,134,000
Greece	1,260,675
Roumania	661,874
Total	134,456,901

Duty paid on wine in France.

	Francs.
1860	176,414,128
1870	223,693,103
1875	386,026,000
1877	399,061,800
1878	411,583,000
1879	421,786,748

APPENDIX II.

Exportations of all the wines and liquors from France during the years before and since the failure of the wine crop from phylloxera commencing in 1879.

	1878.		1879.	
	Hectoliters.	Francs.	Hectoliters.	Francs.
Vin ordinaire:				
From Gironde.....casks..	946,342	76,721,347	1,334,199	122,225,017
All other places.....do....	1,496,674	56,873,597	1,359,689	67,984,447
Gironde.....bottles..	91,138	13,715,688	103,635	15,545,295
Others.....do....	211,300	47,542,595	204,401	45,990,257
Total	2,745,454	194,853,227	3,001,924	251,745,016
Eaux de vie:				
Du vin.....casks..	182,234	43,519,992	218,719	68,354,981
Du vin.....bottles..	70,787	16,315,997	66,948	21,056,059
Cherries	421	94,741	432	97,231
Molasses	4,360	610,442	4,966	695,373
Others	27,569	3,859,713	31,359	4,390,274
Spirits	17,389	1,182,455	18,300	1,226,076
Grand total		260,436,567		347,564,010
For year preceding		285,800,719		276,445,419

	1880.		1881.	
	Hectoliters.	Francs.	Hectoliters.	Francs.
Vin ordinaire:				
From Gironde.....casks..	1,033,393	112,960,915	1,060,917	116,705,168
All other places.....do....	1,057,436	52,871,786	1,138,531	62,619,194
Gironde.....bottles..	106,637	17,595,092	104,658	17,268,583
Others.....do....	248,927	56,008,052	221,524	49,842,954
Total		239,436,445	2,425,630	246,435,899
Eaux du vie:				
Du vin.....casks..	160,392	48,070,324	153,928	42,908,567
Du vin.....bottles..	60,654	18,485,984	61,835	18,129,475
Cherries	425	106,235	572	128,774
Mo'asses	44,352	609,322	4,582	733,173
Others	34,249	4,794,990	36,039	5,045,509
Spirits	17,815	1,336,143	15,729	1,101,058
Grand total		328,338,108		314,482,455
For year preceding		363,522,379		328,338,108

APPENDIX III.

Total importations of all wines and liquors into France during the years before and since the failure of the wine crop from phylloxera, commencing 1879.

	1878.		1879.		1880.	
	Commerce special.		Commerce special.		Commerce special.	
	Hectoliters.	Francs.	Hectoliters.	Francs.	Hectoliters.	Francs.
Vin ordinaire:						
In casks	1, 521, 337	50, 204, 145	2, 828, 418	107, 479, 899	7, 093, 268	297, 917, 248
In bottles	.....	.....	2, 262	271, 495	.....	.....
Vins de liqueurs:						
In casks	78, 656	8, 652, 210	106, 447	12, 773, 644	123, 885	15, 485, 661
In bottles	709	120, 569	983	177, 702	920	183, 864
Eaux de vie (alcohol, pure):						
Of wine	374	41, 990	777	88, 668	7, 903	964, 095
Of cherries	232	52, 360	265	59, 809	182	41, 991
Of molasses	59, 263	8, 296, 896	69, 349	9, 708, 987	63, 802	9, 579, 413
Of all others	15, 263	1, 526, 331	29, 020	2, 902, 059	39, 942	3, 994, 235
Spirits of all sorts (alcohol, pure)	57, 985	4, 928, 804	98, 860	8, 403, 110	148, 416	12, 615, 262
Liqueurs	1, 760	528, 093	1, 870	511, 282	2, 357	707, 373
Total of wines and liquors of all sorts, including beer, cider, and vinegar	.....	88, 279, 085	.....	155, 760, 934	.....	359, 791, 742
For preceding year	.....	54, 506, 231	.....	88, 279, 085	.....	155, 760, 934
Annual increase in importations	.....	33, 772, 804	.....	67, 481, 899	.....	204, 030, 808

	1881.		Increase in importations from 1878 to 1881, four years.	
	Commerce special.			
	Hectoliters.	Francs.	Hectoliters.	Francs.
Vin ordinaire:				
In casks	7, 700, 365	346, 516, 425	6, 179, 028	296, 312, 280
In bottles	3, 453	446, 144	*	*
Vins de liqueurs:				
In casks	133, 881	16, 735, 162	52, 225	8, 082, 925
In bottles	1, 129	225, 854	420	105, 285
Eaux de vie (alcohol, pure):				
Of wine	6, 194	755, 669	5, 820	712, 679
Of cherries	373	83, 825	141	31, 475
Of molasses	62, 530	10, 004, 827	3, 267	1, 707, 931
Of all others	16, 846	1, 682, 328	1, 583	155, 997
Spirits of all sorts (alcohol, pure)	157, 289	13, 369, 549	99, 304	8, 480, 745
Liqueurs	2, 482	744, 897	722	216, 804
Total of wines and liquors of all sorts, including beer, cider, and vinegar	.....	410, 004, 337	.....	.....
For preceding year	.....	359, 791, 742	.....	.....
Annual increase in importations	.....	50, 212, 595	.....	.....
Total increase in importation of all wines and liquors			6, 342, 510	315, 807, 121
Increase in *vin ordinaire* in casks only			6, 179, 028	296, 312, 280
Increase in all others			163, 482	19, 494, 841

* Vin ordinaire "in bottles" was overlooked until after the additions were made.

APPENDIX IV.

Importations from Spain and Italy, showing how the deficit in France since 1879, caused by the phylloxera, has been made up.

From—	1878. Commerce special.		1879. Commerce special.		1880. Commerce special.	
	Hectoliters.	Francs.	Hectoliters.	Francs.	Hectoliters.	Francs.
Spain	1,347,644	48,290,310	2,289,716	92,521,064	5,112,387	221,005,555
Italy	194,782	7,577,811	540,113	21,993 077	1,604,302	69,221,537

From—	1881. Commerce special.		Increase from 1878 to 1881.	
	Hectoliters.	Francs.	Hectoliters.	Francs.
Spain	5,717,938	264,210,637	4,370,294	197,920,327
Italy	1,556,268	72,060,810	1,361,486	64,482,999
Increase in importations from the two countries in the four years from 1878 to 1881			5,731,780	262,403,326

Exportations to Spain and Italy, showing no such corresponding increase.

To—	1878. Commerce special.		1879. Commerce special.		1880. Commerce special.	
	Hectoliters.	Francs.	Hectoliters.	Francs.	Hectoliters.	Francs.
Spain	4,025	597,225	4,201	638,856	4,794	713,879
Italy	14,364	1,114,162	3,705	603,115	3,588	583,322

To—	1881. Commerce special.		Change, *plus* or *minus*.	
	Hectoliters.	Francs.	Hectoliters.	Francs.
Spain	3,672	593,811	— 353	— 3,914
Italy	11,607	1,629,598	(1) —2,757	+515,431
Decrease in exportations to the two countries during same period			—3,110	

(1) Though the price increased, the amount of wine decreased.

APPENDIX V.

Importation of wine and spirits at Bordeaux; illustrating how they made good the deficit caused by the phylloxera in 1879 and subsequent years.

Description.	1878.		1879.		1880.	
	Hectoliters.	Francs.	Hectoliters.	Francs.	Hectoliters.	Francs.
Wine	41,781	1,446,750	285,930	11,663,349	895,448	34,045,820
Spirits	114,855	8,166,429	106,285	11,152,279	178,045	13,386,766

Description.	1881.		Increase from 1878 to 1881.	
	Hectoliters.	Francs.	Hectoliters.	Francs.
Wine	1,262,313	50,351,947	1,220,532	48,905,197
Spirits	1,679,959	46,676,190	1,565,104	38,499,761
Increase in importations of wine and spirits at Bordeaux alone during these four years			2,785,636	87,404,958

Exportation at Bordeaux.

Description.	1878.		1879.		1880.	
	Hectoliters.	Francs.	Hectoliters.	Francs.	Hectoliters.	Francs.
Wine	1,151,270	92,521,882	1,442,424	138,915,160	1,145,667	132,088,158
Spirits	117,200	15,903,875	81,601	25,213,518	154,185	22,931,963

Description.	1881.		Increase from 1878 to 1881.	
	Hectoliters.	Francs.	Hectoliters.	Francs.
Wine	1,173,515	135,184,790	22,245	42,662,998
Spirits	96,453	21,104,812	−23,555	5,200,987
			−1,310	47,863,845

Wines and liquors in entrepôt (bonded warehouse), from January 1, 1878, to December 31, 1881, both at Bordeaux and in all France.

	December 31, 1877.		December 31, 1881.	
	Bordeaux.	All France.	Bordeaux.	All France.
Wines:	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*
Ordinaire	2,425	14,683	12,828	55,583
Liqueur	2,402	5,811	2,838	4,761
Eaux de Vie de Vine		192	279	936
Molasses	1,730	9,429	1,433	11,194
All others	184	11,304	349	6,455
Spirits	1,485	3,889	2,063	14,931
Liqueurs	45	157	32	146
All others		76		404

COMMERCE AND INDUSTRIES OF BRAZIL.

REPORT BY CONSUL-GENERAL ANDREWS, OF RIO DE JANEIRO.

During the year which has just closed Brazil has enjoyed peace and domestic quiet, and made some progress with internal improvements. The low value of coffee, however, has been a calamity to her. This article is her main product and dependence, but it has given such a slender return as to scarcely pay expenses.

A general increase of the tax on imports took effect on the 6th of November last, when the "50 per cent. additional" was raised to 60 per cent. At the same time a reduction of 2 per cent. took effect in the export duty on coffee and wool, leaving the export duty now on coffee at 9 per cent. This amount of duty is now collected on exports of cocoanuts, India rubber, hides, rosewood, dyewood, horse-hair, and rum. On other exports, except sugar, the duty is 5 per cent. On sugar it is 7 per cent.

In respect to the commerce of the United States with Brazil our country barely holds its own. While Brazil is the key to South American trade, and while our countrymen should be inspired with an ambition to control it, the leading facts still are patent that the exports of the United States to Brazil play an insignificant part as compared with those of Great Britain and the continent of Europe; also that our share of the carrying trade has in recent years greatly declined.

CARRYING TRADE.

The following is a statement taken from the records of this office, showing the number and tonnage of American steam and sailing vessels arriving at and departing from Rio de Janeiro during the three past years:

Statement of the navigation of the United States at the port of Rio de Janeiro for the calendar years 1880, 1881, *and* 1882, *as shown by the records of the United States consulate-general.*

AMERICAN VESSELS ENTERED AT THE PORT OF RIO DE JANEIRO.

Years.	Steamers.		Sailing vessels.		Total tons.
	Number.	Tons.	Number.	Tons.	
First quarter, 1880	2	7,180.55	32	19,182.87	26,363.42
Second quarter, 1880	5	16,096.53	23	11,116.62	27,213.15
Third quarter, 1880	3	10,628.85	26	16,229.53	26,928.38
Fourth quarter, 1880	3	10,612.80	36	20,445.55	31,058.35
Total	13	44,518.73	117	67,044.57	111,563.30
First quarter, 1881	3	9,097.26	26	12,439.83	21,537.09
Second quarter, 1881	5	13,429.65	34	24,315.94	37,745.59
Third quarter, 1881	1	2,131.49	29	19,853.01	21,984.50
Fourth quarter, 1881	1	2,134.86	27	18,363.51	20,498.37
Total	10	26,793.26	116	74,972.29	101,765.55
First quarter, 1882	1	2,014.42	16	6,910.09	8,924.51
Second quarter, 1882	1	2,727.80	21	12,903.86	15,631.66
Third quarter, 1882	2	2,241.68	22	15,416.90	17,658.58
Fourth quarter, 1882	.....	.....	23	12,651.98	12,651.98
Total	4	6,983.90	82	47,882.83	54,866.73

AMERICAN VESSELS CLEARED FROM THE PORT OF RIO DE JANEIRO.

Years.	Steamers.		Sailing vessels.		Total tons.
	Number.	Tons.	Number.	Tons.	
First quarter, 1880	3	10,728.85	35	19,688.95	30,417.80
Second quarter, 1880	4	13,334.69	33	22,679.49	36,014,18
Third quarter, 1880	3	9,842.39	24	18,223.11	28,065.50
Fourth quarter, 1880	4	14,161.10	4.	17,248.71	31,409.80
Total	14	48,067.03	122	77,840.25	125,907.28
First quarter, 1881	4	12,629.51	30	13,335.58	25,965.00
Second quarter, 1881	5	13,429.65	26	16,930.49	30,460.14
Third quarter, 1881	1	2,131.49	32	22,897.64	25,529.13
Fourth quarter, 1881	1	2,134.86	26	19,084.75	21,219.61
Total	11	30,325.51	114	72,248.46	102,573.97
First quarter, 1882	1	2,014.42	22	11,108.66	13,123.08
Second quarter, 1882	1	2,727.80	20	10,481.39	13,209,19
Third quarter, 1882	2	2,241.68	20	11,959.08	14,200.77
Fourth quarter, 1882	.....	.....	23	12,911.86	12,911.86
Total	4	6,983.90	85	46,461.00	53,444.90

From the foregoing table it will be seen that the decrease of American steam and sailing tonnage together arriving at Rio, 1880–1882, was 56,696.57 tons, or 50 per cent., and of American steam and sailing vessels clearing from Rio, the same period, 72,462.38 tons, or 57 per cent. The decrease of American steam-tonnage arriving at Rio from 1880 to the end of 1882 was 37,534.82 tons, or 84 per cent., and of American steam vessels clearing from Rio, the same period, 41,083.31 tons, or 85 per cent. The decrease, in the same period, of American sailing vessels arriving at Rio was 19,161.74 tons, or 28 per cent., and of American sailing vessels clearing from Rio, the same period, 31,379.25 tons, or 40 per cent.

The decrease in American steam tonnage at this port has been, in reality, more than is shown by the foregoing figures, because in the returns for 1882 are included certain of the Pacific Mail Company's vessels which transiently called here on their way round to the Pacific coast.

Such a decline in our shipping the Department will hardly credit. The returns, however, have been carefully compiled from the exact records in this office, and may be relied on as true. The reason for there being such a marked decline in steam navigation in 1882, as compared with 1880, was the discontinuance of the so-called Roach Line, which was withdrawn in the early part of 1881. But why should there have been a decline of from 28 per cent. to 40 per cent. in American sailing tonnage at the same time? One would suppose that when a line of American steamers was withdrawn, there would be an increase on the same route of American sailing vessels. The cause of decline in our navigation has not been a lack of traffic, because our imports from Brazil have in bulk been yearly increasing. It can only be owing to the superior maritime enterprise, especially in steam vessels, of European countries, and which is rapidly driving our flag from the sea.

Statement No. 1, herewith, shows the foreign navigation at this port during the year ending December 31, 1881, as taken from the custom-house records.

The whole number of vessels arriving and clearing was 2,272. Total sailing tonnage arriving, 364,801 tons; clearing, 231,074 tons. Total steam tonnage arriving, 754,955 tons, and clearing, 725,132 tons.

Statement No. 2 shows the nationality of the navigation at this port for the year ending December 31, 1881, also taken from the custom-house records. From this it appears that the total steam tonnage of the United States arriving in Rio in 1881 was 40,630 tons; of Germany, 100,015 tons; of France, 176,329 tons; of Great Britain, 306,439 tons.

EXPORTS AND IMPORTS.

The foreign commerce of Rio de Janeiro amounts to 50 per cent. of that of the whole empire.

From the following table it will be seen that the total exports from Rio de Janeiro for the year ending June 30, 1881, according to the custom-house returns, amounted to $49,950,774.28, and that the duties collected on the same amounted to $4,313,314.66. The average duties were a little over 9 per cent. The exports exceeded in value those for the year ending June 30, 1880, by $6,774,000. It will be seen that the exports to the United States, consisting of coffee, hides, rosewood, &c., amounted to $23,680,416, which was $2,200,000 less than for the preceding fiscal year. The duties collected on the exports to the United States were $2,130,468.

Statement showing the exports from Rio de Janeiro for the year ending June 30, 1881.

Description.	Values in United States dollars.	Amount of export duties.	Countries whither exported.
Coffee	$202,199 09	$18,197 91	Africa.
Coffee, sugar, mandioca, flour, spirits	770,527 78	57,504 50	Argentine Republic.
Coffee	43,124 70	3,881 22	Austria-Hungary.
Do	2,681,710 89	242,241 19	Belgium.
Coffee, hides, tobacco	250,060 69	22,205 46	British Channel.
Coffee	659,884 13	64,787 88	Cape of Good Hope.
Do	7,261 87	653 56	Cape Town.
Do	19,228 66	1,728 48	Chili.
Do	82,756 00	7,529 41	Denmark.
Coffee, diamonds, rosewood, hides	7,357,737 70	645,701 46	France.
Coffee, hides, &c	4,665,684 78	420,567 40	Germany.
Coffee, gold, diamonds, crystals	4,733,007 63	369,098 43	Great Britain.
Coffee	331,404 23	29,826 39	Gibraltar.
Do	169,742 47	15,226 09	Italy.
Do	289,264 63	25,998 98	Mediterranean.
Matting	60 20	3 01	Netherlands.
Do	692 30	34 61	Norway.
Coffee	10,578 00	952 02	Port Natal.
Coffee, spirits, tobacco	2,177,452 51	196,563 32	Portugal.
Coffee	44,925 98	4,043 33	Spain.
Do	10 32	92	St. Thomas.
Matting	456 31	22 81	Sweden.
Coffee, hides, rosewood, &c	23,680,416 00	2,130,468 00	United States.
Coffee, sugar, spirits, tobacco, mandioca, flour	1,085,013 89	57,079 28	Uruguay.
Miscellaneous	687,574 02		Different countries.
Total	49,950,774 28	4,313,314 66	

IMPORTS.

The table below shows the imports at Rio for the year ending June 30, 1881, their description, value, amount of duties collected, and the countries from whence imported.

The total value of the imports was $41,476,816.17, and the amount of duties collected thereon was $18,183,601.83, being an average of 44 per cent. The value of the imports was $432,000 less than those for the

year ending June 30, 1881. Indeed, the similarity of the total value of imports for the last-mentioned year with that of the imports for the year ending June 30, 1880, was so marked that I at first thought some mistake had been made, and took the precaution to personally examine the returns for the two years at the custom-house.

The imports from the United States amounted to $3,516,986, being $73,781 less than for the preceding fiscal year; those from Germany to $3,535,415.66, or $220,383 less than for the preceding fiscal year; those from France to $7,524,965.87, or $411,882 more than for the preceding fiscal year; those from Great Britain to $16,226,956.41, or $552,636 less than for the preceding fiscal year. The imports from Great Britain, France, and Germany together amounted to $27,287,337.94, being eight times the amount of those from the United States. The duties collected on the imports from the United States amounted to $1,529,456, being a little over an average of 43 per cent.

Statement showing the imports at Rio de Janeiro for the year ending June 30, 1881.

Description.	Values in United States money.	Amount of duties.	Countries whence imported
Provisions, grain, fruit, and metals	$1,686,598 80	$759,419 34	Argentine Republic.
Furniture, flour, &c	33,964 71	15,284 11	Austria-Hungary.
Cotton, manufactured, machinery, iron, paper, &c.	2,188,292 15	950,431 46	Belgium.
Flour, &c	84,298 04	37,934 11	Chili.
Rice	123,272 05	55,472 42	China.
Lumber	3,875 73	1,744 07	Denmark.
Manufactures of cotton, silk, linen, wool, metals, skins, wines, watches, and porcelain.	7,524,965 87	3,278,734 64	France.
Manufactures of cotton, wool, linen, preserved food, &c.	3,535,415 66	1,537,187 06	Germany.
Manufactures of cotton, wool, linen, coal, iron, steel, machinery.	16,226,956 41	7,108,174 74	Great Britain.
Cereals, liquors, straw, &c	312,796 67	140,758 50	Italy.
Meat and fish preserved	65,506 23	29,477 80	Netherlands.
Spirits, wines, drugs, fruits	2,810,997 91	1,226,249 06	Portugal.
Lumber	32,444 36	14,599 96	Russia.
Spirits, wines	88,493 31	39,821 63	Spain.
Iron and steel	8,203 18	3,069 93	Sweden.
Flour, lard, kerosene, provisions, machinery, lumber, cotton manufactures.	3,516,986 00	1,529,456 00	United States.
Metals, meat, cereals	3,233,662 89	1,455,148 30	Uruguay.
Plants	86 00	38 70	West Indies.
Total value	41,476,816 17	18,183,601 83	

The following statement shows the exports to the United States from Rio de Janeiro for the year ending June 30, 1882, as taken from the records of the consulate-general. It is to be remarked that the values as shown by the records of this office include custom-house charges and commissions, and are consequently greater than the custom-house valuation.

Description.	Quantities.	Value in United States dollars.
Coffee ..... bags	2,315,982	$26,537,109 85
Sugar ..... do	47,971	248,556 83
Rosewood ..... logs	2,045	59,359 31
Hides ..... number	5,164	29,944 05
Ipecacuanha ..... bags	236	23,098 26
Old iron ..... tons	1,195	12,658 21
Horns and bones		1,259 30
Cinnamon		498 84
Tapioca		474 61
Miscellaneous		7,956 36
Total		26,920,915 62

Although the exports from Rio to the United States, as shown by the above table, were in value $5,616,413 less than for the year ending June 30, 1881, they were in quantity much larger. There were 182,803 more bags of coffee exported from Rio to the United States in the year ending June 30, 1882, than in the year ending June 30, 1881. The shrinkage in value of exports was owing to the remarkable decline in the price of coffee.

The only other coffee-exporting ports of importance in Brazil besides Rio are Santos and Bahia. If we take the exports of coffee to the United States from each of those ports for the year ending June 30, 1882, namely, 127,920 bags from Santos and 22,738 bags from Bahia, and add to those from Rio, we find that for the period mentioned there were exported to the United States 2,466,649 bags, being 325,595,668 pounds, and of the value, according to consular records, of $28,205,461.85.

Statement No. 3, herewith, shows the description, quantities and values of exports from Brazil for the year ending June 30, 1881. Their total value was $99,000,000. The value of imports the same period was $77,257.24.

I will here state that the total revenue collected on imports and exports at the custom-house of Rio de Janeiro for the fiscal year ending June 30, 1882, was $17,205,912.61, being $678,380.47 less than for the previous fiscal year.

BRAZILIAN TARIFF ON IMPORTS.

I have previously stated that the "50 per cent. additional" on all import duties has been raised to "60 per cent."

In order to show at a glance how burdensome the Brazilian tariff is on our trade, I give below a statement of goods such as are commonly imported or which could be imported conveniently from the United States, with the present rate of customs duty, in money of the United States, on each article. The rate of duty includes the warehouse charge, which applies to all goods except kerosene, fresh fruits, and a very few other articles:

Duties on articles of subsistence.

Wheat flour	per barrel..	$0 64
Maize	per hundred pounds..	15
Pork	do....	09
Lard	do....	04
Hams	do....	08
Bacon	do....	13
Butter	do....	11
Cheese	do....	09
Fresh fruits	do....	15
Preserved	do....	10
Whisky	per gallon..	1 65

Duties on cotton manufactures.

Unbleached cotton cloth	per pound..	$0 12
Shirting	do....	20
Calicoes	do....	37

Duties on hardware.

Fence wire	per pound..	$0 02
Axes, hatches, spades, hoes, picks, and tools for masons	per hundred pounds..	15
Carpenters' and joiners' tools	do....	45

Duties on miscellaneous goods.

Kerosene:	
Per case 64 pounds net	$1 30
Or per pound	02
Lumber, per cubic meter (1.3 cubic yards)	3 54
Men's boots and shoes, per pair	1 10
Platform scales, each capacity 220 pounds	5 55
Platform scales, each capacity 11,000 pounds	69 00
Watches and clocks, each	1 00
Pianos, in common use, each	83 50

It will be seen from the above that the duty imposed on several necessaries, such as butter, cheese, pork, and bacon, exceeds their original cost. To illustrate what a heavy tax has to be paid on a single cargo, I would state that an American sailing ship, which arrived here from Boston in the latter part of the month, loaded with apples and ice, paid into the custom-house in duties the sum of $7,330. The duties on 2,400 barrels of apples and 31 barrels of pears amounted to $6,000.

I submit that important reductions of duties on imports from the United States should be demanded in consideration of the latter continuing to admit coffee from Brazil free of duty. We also admit free of duty India rubber, cocoa, and cabinet wood of Brazil.

In my special report of November* 23 I had the honor to call attention to the import duties which several European countries collect on coffee: England, 3 cents a pound; Germany, 4½ cents; Austria-Hungary, 7 cents; Italy, 10 cents; and France, 14 cents a pound, while for several years the United States has admitted it free of duty. Not only does Brazil tax excessively the goods imported from the United States, but she also collects an export tax amounting to nearly $2,500,000 a year on the coffee which she sells to the United States.

FINANCIAL SITUATION.

In considering the finances of Brazil, the fact should not be lost sight of that there is owing to her from the Republics of Uruguay and Paraguay the sum of $6,727,036, bearing interest at 6 per cent., payable annually. With a population of twelve millions, the total debt of Brazil at the end of 1882 is $343,404,628, which is owing principally in Great Britain. The interest varies from 4 to 6 per cent. Probably 25 per cent. of this debt has been expended on productive objects.

The government has been authorized and contemplates contracting an additional loan. The Parliament at its last session provided for a total income for the year ending June 30, 1883, of $26,382,981, and for expenditures for the same period, $29,000,000.

CURRENCY.

At this time the amount of money in circulation, consisting of irredeemable notes, is $122,346,370. The total amount of gold coined and issued up to 1880 was $19,262,080. The amount of silver coined and issued from 1867 to 1880 was $8,068,355. The amount of nickel coin issued up to 1880 was $8,841,487; and of copper, $1,653,106.

There is no gold coin in circulation, and very little of silver. As bank checks are not habitually used in business transactions, trade suffers somewhat for a lack of the circulating medium. Its value fluctuates, and it has also depreciated in the past few years.

The unit of measure of Brazilian money is the *milreis*, of the value

* Report mentioned immediately follows this report.

in gold of $0.546. Its value in paper is now about 42 cents. The milreis is expressed in figures thus: 1$000 (one thousand reis); on the same principle as it would be for us in the United States to express the dollar in mills. Half a milreis (five hundred reis) is written: $500; equivalent to, say, 21 cents.

The Parliament is not restricted as to the issue of paper money. However, a conservative policy appears to be pursued in this regard; and it can be said with truth that Brazil is punctual in the payment of the interest on the public debt.

RAILROADS.

There has been considerable progress and deep interest felt in railroad development the past year. The government owns and administers several lines, and, as a rule, guarantees an income of 7 per cent. on the necessary capital invested in the construction of private roads. The number of miles of railroad owned and in operation by the government is 800; and it also has nearly the same number of miles of railroad in course of construction, and which probably will be finished in six or eight months.

The number of miles of private railroads in operation is 1,600, and in course of construction, 1,400. On the capital of $34,000,000 employed by the private companies owning these roads the government has guaranteed an annual income of 7 per cent. This guaranty is not a loan, but an absolute gift; and so far the government continues to pay the interest on the above-mentioned capital. As soon as the companies begin to make sufficient earnings, the government will cease the payment of the interest. Fully one-third of the railroads are through a hilly country. The greater portion of them are through a country that has long been settled, though a considerable part is yet but sparsely settled. Most of the rails with which the roads have been made were imported from England, while a part of the rolling stock was brought from the United States. The roads are surveyed and built by Brazilian engineers almost wholly. They sometimes suffer considerable damage and obstruction from freshets.

Picture, however, a territory as large as all that part of the United States lying east of the Rocky Mountains only supplied with as many miles of railroad as are to be found in the State of Massachusetts, and you will perceive how very limited as yet is the railroad development of this country.

DOM PEDRO II RAILWAY.

Some particulars may be of interest in respect to the traffic of the principal railroad of Brazil, which is named in honor of the present Emperor, Dom Pedro II. This line runs from Rio de Janeiro to the more important towns tributary to that city, and principally through a coffee, maize, cattle, and swine producing country. The main line, with extensions, now in operation comprises five hundred miles. That part of it from Rio to San Paulo runs through the fertile valley of the Parahyba, and generally in view of beautiful mountain scenery. It is a favorite route for tourists. The expenses of this road for the year 1881 were $2,400,000, and the gross receipts were $5,600,000, leaving a net income of $3,200,000, which was a very large profit on the capital invested. For the first six months of this year (1882) the expenses of the road were $1,198,750, and the gross receipts were $2,091,500, leav-

ing a net income of $892,750. The receipts for this last-mentioned period were largely reduced by continued interruption of business on the principal line during February and March, caused by heavy rains. The cost of constructing the road was $39,264,230. The total number of passengers transported on this road during the ten years ending December 31, 1881, was 2,757,487, and the casualties were fourteen deaths and twenty-four wounded. The number of passenger cars of all classes owned by the road is 178; baggage cars, 37; freight cars for animals, 113; and for freight generally, 1,358. During the year ending December 31, 1881, this road brought into the city of Rio de Janeiro 361,516,652 pounds of coffee, which paid freight amounting to $4,017,250, which was an average rate of one cent and one mill per pound, equivalent to $1.45 per bag. The exorbitant rate of this tariff will be apparent when it is remembered that the freight paid on a bag of coffee per steamship from Rio to New York, a distance of 5,000 miles, is 40 cents, and on a sailing vessel 30 cents. Indeed, parties in Rio have recently refused to receive coffee of the lower grades arriving from plantations, on account of the high railroad-freight charges with which it was burdened.

POST-OFFICE DEPARTMENT.

For the year ending December 31, 1881, the postal receipts were $613,489, and the expenses $717,745, leaving a deficit of $104,256. The movement of correspondence was 75,451,358, including letters, newspapers, and objects, of which 44,222,723 paid postage. Of registered correspondence with declared value there were 1,394 official letters, of a total value of $413,898, and 23,623 private letters, of the value, of $323,800. The number of registered letters and objects without declared value was, official, 18,115, and private, 249,680.

PUBLIC INSTRUCTION.

There are in Brazil two academies or schools of medicine, one at Rio and one at Bahia; two of law, one in San Paulo, another in Recife; one school of civil engineering at Rio, one of mining at Ouro Preto; a normal school, an imperial college entitled Dom Pedro II, a school of fine arts, and a conservatory of music, the four last at Rio; an institute for the blind, another for the deaf and dumb, a reform school for boys, one for girls, also the imperial art and industrial school for evening instruction, are also located at Rio.

There are in the empire 2,000 primary public schools and 1,000 public schools for higher branches, including languages. The state expends annually for public instruction $8,158,929. It possesses one national library, for which the state expends annually $20,638. It expends for the public museum at Rio $18,928. A bill for compulsory instruction was introduced into Parliament by the government in 1881, but it has not yet become a law. There is a taste and inclination for education among all classes. There is public competitive examination for the selection of all school teachers; the latter are well paid, the average sum being $100 a month. After the year 1883 annual reports will be made upon public instruction; from which time also it is expected that improvements will be introduced in the administration of educational interests.

IMMIGRATION.

There is a bureau of colonization and immigration in the department of agriculture. As inducements for immigration, the government offers to foreigners free subsistence and shelter at the government boarding-

house in Rio de Janeiro during the time it is necessary for him to wait, after disembarking, till he sets out for his destination on the public lands; free transportation thereto, with his baggage, from Rio de Janeiro; the privilege of buying land on credit, the first payment to be at the end of the second year of settlement, and four other payments during the succeding four years, with a discount of 6 per cent. if payment be made before due; a donation of necessary implements and seeds for planting the first season; an allowance of twenty cents per day for each adult and ten cents for each child during the first six months after settlement. Each adult immigrant receives 250 square metres of arable public land (say about eight acres), for which he must pay three hundred milreis ($128) cash, or $16 an acre. If, however, he requires time for payment, the price is 20 per cent. additional. To those who are acquainted with the advantages offered immigrants under our homestead laws, these conditions will seem extraordinary.

The government now aids twelve colonies, which are mostly on the the coast or not far in the interior, and comprising a population of 62,447. The total number of immigrants arriving at Rio de Janeiro from January 1, 1880, to January 1, 1882—two years—was 40,783, of whom 2,057 were aided by the government. Eleven thousand of these immigrants were from Italy, 17,000 from Portugal, and 4,000 from Germany. The state expends annually $212,766 to promote immigration. Formerly it expended three times this amount.

TELEGRAPHS.

Brazil has in thirteen provinces 14,000 kilometers of telegraph wire, or about 7,500 kilometers of telegraph lines. There are 131 stations. The system is wholly owned and under the charge of the government. A new line is being built from Corritiba to Guarapuara, in the Province of Paraná. Its estimated cost is about $100 per kilometer.

TRADE-MARKS.

Brazil was represented at the international trade-mark conference at Paris, November 4, 1880, and its government has approved of the project which was then adopted, though the treaty has not yet been ratified by the Parliament. Assuming that it will be duly ratified, of which there is no doubt, the department of agriculture and commerce, which has charge of the matter, has proceeded to register trade-marks under its provisions. However, a trade-mark law has been in force in Brazil since 1875, and the number of trade-marks registered in the empire since that date and up to June 30, 1882, was 163. Of this number 64 were registered under the international treaty.

CENTRAL SUGAR FACTORIES.

There are in twelve provinces a total of forty-four so-called central sugar factories, with a capital of $21,276,599, enjoying a guarantee from the State of 7 per cent. interest per year, which guarantee lasts from fourteen to twenty years. The interest is paid every six months. Guarantees of similar income on capital in sugar factories are still disposable for capital to the amount of $2,063,850. This capital, however, must be employed in the following provinces: Maranhão, Ceara, Parchyba, Pernambuco, Alagoas, and Bahia.

RIO DE JANEIRO.

There are quite a number of respectable Americans, from various parts of our country, residing here, and actively engaged in different kinds of business. As a rule, they like the climate. The city of Rio de

Janeiro must now have nearly 400,000 inhabitants. It is becoming abundantly supplied with pure water.

Its streets are paved with cut-granite, and are very well lighted. The street-cars run in numerous directions, are tidy and comfortable, and patronized by the wealthy. Several lines run into the suburbs, among the foliage-covered foot-hills of the mountains, in localities regarded as healthy, and where dwellings can be had, partaking of city and rural comforts.

There are several hotels that have a good reputation. The best season for Americans to visit Rio, probably, is in June, July and August, which are the winter months of this country. The temperature then is what we would call, in the United States, cool summer weather.

In a former report I have pointed out that the voyage from our country to Brazil is much pleasanter than is generally supposed. It is not so trying as that across the Atlantic.

C. C. ANDREWS,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Rio de Janeiro, December 31, 1882.

Statement showing the navigation at the port of Rio de Janeiro, for the year ending December 31, 1881.

From—	ENTERED.					
	Sailing.			Steamers.		
	Number.	Tonnage.	Crew.	Number.	Tonnage.	Crew.
Africa	10	3,331	37			
Australia	2	1,120	32			
Austria	6	1,393	49			
Argentine Republic	78	22,024	718	38	52,601	1,824
Belgium	15	4,937	147	2	1,961	54
British Channel						
Central America						
Cape of Good Hope	3	462	18			
California						
Canada	1					
Chili		310	8	35	50,996	2,037
Cape Verde	3	1,160	30			
China	1	531	10			
France	37	13,487	383	57	91,922	4,356
Germany	15	5,895	149	38	66,739	2,224
Greece						
Great Britain	281	188,161	3,957	113	173,039	6,764
Gibraltar						
Italy	10	3,556	108	12	12,786	596
India						
Mexico						
Norway	1	353	9			
Netherlands	1	1,206	23			
Newfoundland	2	2,209	16			
Oceanica	1	1,355	26			
Peru	4	1,330	48			
Portugal	69	28,681	795	1	1,117	35
Russia	9	2,260	75			
Spain	14	3,438	117			
Sweden	9	2,383	79			
United States	155	61,024	1,581	16	47,740	1,126
Uruguay	86	15,729	842	179	259,084	10,336
Total	817	364,801	9,333	481	757,955	29,370

Statement showing the navigation at the port of Rio de Janeiro, &c.—Continued.

To—	CLEARED.					
	Sailing.			Steamer.		
	Number.	Tonnage.	Crew.	Number.	Tonnage.	Crew.
Africa	4	2,554	56			
Australia	49	21,338	562			
Austria	4	1,827	51			
Argentine Republic	9	1,551	73	8	7,995	310
Belgium	1	227	7	5	4,972	204
British Channel	3	749	25			
Central America	3	1,549	30			
Cape of Good Hope	21	5,049	188			
California	23	30,400	302			
Canada	3	3,202	55			
Chili	21	14,547	325	22	50,686	1,913
Cape Verde						
China	4	4,078	73			
France	18	7,624	194	79	127,788	5,755
Germany	1	674	12	56	91,248	2,727
Greece	1	928	15			
Great Britain	28	14,612	354	110	174,924	6,842
Gibraltar	14	3,354	123			
Italy				1	1,317	68
India	2	2,215	26			
Mexico	3	1,149	28			
Norway	1	307	10			
Netherlands						
Newfoundland						
Oceanica	4	3,752	57			
Peru	4	2,374	48			
Portugal	51	14,997	462			
Russia						
Spain	3	558	25	1	1,100	50
Sweden						
United States	201	86,496	2,139	53	91,994	2,499
Uruguay	27	4,968	273	136	173,108	8,902
Total	503	231,074	5,718	471	725,132	29,271

Statement showing nationality of vessels arriving at and departing from Rio de Janeiro, for the calendar year ending December 31, 1881.

Flag.	ENTERED.					
	Sailing.			Steamer.		
	Number.	Tonnage.	Crew.	Number.	Tonnage.	Crew.
Argentine Republic	7	2,622	75			
Austria	4	1,365	40			
Belgium	1	207	7	31	39,138	1,101
Brazil	21	4,525	188	60	52,126	2,453
Denmark	14	4,341	109	1	1,521	55
France	27	12,038	231	97	176,329	8,228
Germany	78	23,398	703	59	100,015	3,390
Great Britain	281	164,358	3,695	195	306,439	11,798
Italy	17	7,318	200	25	4,757	1,401
Netherlands	3	603	22			
Norway	53	17,009	502			
Portugal	55	24,060	669			
Russia	2	1,192	36			
Spain	94	17,522	952			
Sweden	59	14,271	403			
United States	120	69,572	1,401	13	40,630	968
Total	817	364,801	9,333	481	757,955	29,379
Total 1880	898	370,686	9,884	452	726,035	28,955

Statement showing nationality of vessels, &c.—Continued.

Flag.	CLEARED.					
	Sailing.			Steamer.		
	Number.	Tonnage.	Crew.	Number.	Tonnage.	Crew.
Argentine Republic	8	1,604	39	1	159	17
Austria	1	414	10	.....	.....	.....
Belgium	1	207	7	29	35,256	1,046
Brazil	9	2,297	70	47	27,935	1,962
Denmark	12	3,413	97	1	1,602	22
France	19	9,081	243	96	175,967	8,809
Germany	57	17,730	507	63	100,612	3,314
Great Britain	175	112,210	2,389	24	26,427	1,274
Italy	11	4,189	124	.....	.....	.....
Netherlands	1	200	7	196	309,747	11,952
Norway	36	11,074	335	....	.....	.....
Portugal	36	13,695	418	.....	.....	.....
Russia	3	1,192	38	.....	.....	.....
Spain	23	4,352	281	.....	.....	.....
Sweden	25	8,430	245	.....	.....	.....
United States	85	40,345	947	14	41,427	935
Total	502	230,888	5,708	472	725,318	29,276
Total 1880	642	235,477	6,553	383	635,469	24,522

Statement of the exports from Brazil, for the year ending June 30, 1881.

Descriptions.	Quantities.	Value in United States dollars.
Rum ..... quarts	2,704,934	$131,000
Cotton ..... pounds	28,000,000	624,000
Sugar ..... do	355,000,000	11,000,000
Horse-hair ..... do	400,000	110,000
Cocoa ..... do	2,400,000	300,000
Coffee ..... do	483,000,000	53,600,000
Brazil nuts ..... do	13,000,000	500,000
Raw hides ..... do	47,000,000	4,000,000
Diamonds ..... grams	19,519	556,000
Mandioca meal ..... pounds	5,000,000	113,000
Tobacco and its manufactures ..... do	48,000,000	3,200,000
India-rubber ..... do	15,000,000	5,000,000
Matté tea ..... do	31,000	1,600,000
Wool ..... do	700,000	66,000
Miscellaneous	.....	16,200,000
		99,000,000

THE BRAZILIAN COFFEE TRADE.

REPORT BY CONSUL-GENERAL ANDREWS.

The present remarkable cheapness of Brazilian coffee makes it of interest to consider the economical situation of the trade.

The price, including freight to New York, of "good-first" coffee in this market now is 40*s.* for 112 pounds, which is equivalent to 8½ cents per pound; the price of good-second being 6½ cents a pound. It has not been so low as it is this season since the year 1857. It gradually rose after that year to be worth 17 cents a pound for "good-first" in 1864, then declined and remained for several years at about 11 cents a

pound, after which it rose to 17 cents in 1871–1872, and to 23 cents in 1873–1874, a period when the crop was light.

The crop of this year was about 800,000,000 pounds, and nothing has yet occurred to indicate that the crop of next year will be less.

Fortunately there is no disposition here to speculate in this staple, it being considered unwise to attempt anything of the sort with an article so large in quantity and which can be had from so many and so extensive sources.

The main causes of the low price now are the extremely large production, the large quantity on hand, and the medium quality of the coffee itself. The one remarkable fact in regard to the crop of the season just past was the absence of superior qualities, such as are termed "prime good-first." The lack of these qualities—and they are scarcely to be had—is probably owing to a lack of labor in cultivating, and to the planter undertaking to do too much.

The profit to the planter has become so small that he thinks the crop is not worth spending money on.

The number of hands on the plantations is yearly growing less and also growing worse. Many of the lower qualities of coffee do not now pay expenses.

I regret here to state that the practice obtains among some dealers of applying artificial color to coffee. This is done by mixing a relatively very small quantity of black lead with coffee of a light color to give it a somewhat dark-green color, the coffee being finally brushed to brighten it up.

The process of counterfeiting is all by machinery, and raises the price of the counterfeit goods 10 per cent.

Although Brazil stands at the head of coffee-producing countries, its culture therein does not enjoy the benefits either of small farms or of free labor.

The plantations are very extensive, and are worked almost wholly by slaves. The bulk of the crop is grown in the province of Rio de Janeiro and the adjoining provinces of San Paulo and Minas Geraes, and mostly on hillsides.

The soil is tolerably well hoed, but not manured. The first blossoming of the coffee tree occurs in September and a second one in November. Harvesting commences about April or May, and the crop begins to arrive in the market in June or July. It is sometimes injured by being left too long a time on the ground after it has been picked.

What is known in the market as "washed" coffee, being, however, but a small proportion, is that which has been picked before fully ripe and while the fruit has a red and cherry-like appearance, and then put into water and the kernels separated from the hull by washing.

In the market it has an almost polished and silvery appearance, and is a fancy article. But usually coffee is hulled or threshed—and mechanically—after it is ripe and dry. From the plantation it is taken in coarse sacks, which bear the planter's name, and are afterwards returned to him, on mules or in ox-carts to the nearest railway station, whence it is carried on the government railroad at very high rates of transportation to the seaport.

Arrived at the market, it has before shipment to go through several hands, each taking a liberal profit. First, into the hands of the planter's agent, generally the creditor of the planter, and whom he charges from 6 to 12 per cent. interest for loans.

The agent sells the coffee to the "dealer" and charges the planter 3 per cent. of the price for his services.

The "dealer" manipulates the coffee, mixing different sorts together, and puts it into bags. He sells to the exporter through a broker, who receives 50 reis (at present, a little over 2 cents) from the dealer and a like amount from the exporter on each bag.

The broker's charge has by law been reduced to one-fifth per cent. of the value of the coffee, but as yet the regulation is not complied with. Besides these several charges there are heavy expenses for cartage.

After the coffee arrives here it is conveyed from the railway station to the agent's store; afterwards to the dealer's store, and from thence to the docks or place of shipment, being transported each time through narrow streets by mule power and handled by costly labor.

In all the various cartages from the time it leaves the plantation, there is considerable wastage.

Actual experiments have shown that the soil and climate of this country are favorable to the growth of jute. Still the material of which coffee bags are made is brought from a great distance.

The jute is grown in India, then carried to Dundee, Scotland, where it is spun and woven, and from there imported into Brazil in the web.

Here, too, an import duty is charged on it of 240 reis per kilo, amounting fully to three cents per bag.

The manufacture of the bags is rather a monopoly enjoyed by the "dealers," who exact a profit of 20 cents on each bag.

An export duty on coffee has to be paid into the treasury of Brazil. For a considerable period this tax remained at 13 per cent. on an average valuation fixed by the government, but was reduced the 6th of November, 1882, to 11 per cent. During the year ending June 30, 1881, the total export of coffee from Brazil was 546,401,964 pounds, on which the total export duty was $4,186,635.

Sixty and one-half per cent. of the total export, namely, 330,938,634 pounds, went to the United States, and on that quantity there was paid into the treasury of Brazil export duties amounting to $2,532,000, which probably fell about equally on the American consumer and the Brazilian producer.

The policy of the United States in admitting coffee free of duty is different from that of probably every other country. The duty collected per pound on raw coffee in several European countries is as follows, namely: Belgium, 1¼ cents; Denmark, 2 cents; Great Britain, 3 cents; Sweden, 3 cents; Russia, 3½ cents; Germany, 4½ cents; Norway, 5 cents; Austria-Hungary, 7 cents; Italy, 10 cents; and France, 14 cents.

While the United States have for ten years been admitting Brazil's great staple free of duty, the latter country has been steadily increasing her duty on imports, including those from the United States.

A fresh increase of 10 per cent. on all imports took effect the 6th instant.

C. C. ANDREWS,
Consul-General.

UNITED STATES CONSULATE,
RIO DE JANEIRO, *November* 23, 1882.

EXPORTS FROM TORONTO TO THE UNITED STATES.

REPORT BY CONSUL HOWELLS.

With the general improvement of business in the United States, there has been a rapid advance in the trade of Canada within the past two or three years.

The comparative table of "exports declared" in this consular district for the year ending September 30, 1882, shows an increase in values, over previous years, of more than 100 per cent. in the last four years. These exports are from quite a limited extent of this province, and are almost entirely the product of the soil. But as a means of judging of the actually exported products of the country, they are somewhat uncertain—especially as they show re-exportations in some cases, and in others articles placed in bond when in transit through the United States territory.

Of the $10,417,818 of values declared for export during the year, perhaps half a million is made up of articles in transit or re-exported.

A short time ago the chief article of export from this province was lumber; but it is now barley, which stands to lumber as six to one. This is the result of the rapid and wasteful destruction of the forests until the supply of timber is nearly exhausted.

This year the barley crop has been unusually heavy, though the quality is greatly inferior to that of the last two years—so much so that a very small proportion of it rates as No. 1. The price of barley has ruled so low on this account that farmers are using it as feed for their cattle, it being very little if any dearer than Indian corn.

The animals exported to the United States for breeding purposes form an important item in the Canadian trade, amounting in this district to $138,000 worth in the year just closed. Of these a large proportion, in numbers as well as value, was made up of stallions and mares, mostly of the Clydesdale breeds. For breeding purposes, these are most valuable, as they are large, well proportioned, and active. New importations are being constantly made from Scotland, from which and their offspring the supply is well maintained.

The sheep exported for this purpose are almost entirely of the Southdown and Cotswold breeds. The demand for the latter has, however, fallen off with the recent decline in long wools.

Within the last year very few neat cattle have been exported for breeding, and of swine the number is also limited to a few Berkshires and Suffolks.

The demand for horses for export to the United States has of late been very active; and prices have advanced beyond precedent, and till the actual prices paid for horses in this province are nearly up to those paid in the adjacent States. I am assured by buyers in the trade that the sale of Canadian horses, at sufficient advance over cost to maintain the trade, largely depends upon a prejudice favorable to the horses of Canada as being more hardy than ours. I have observed a steady increase in the valuation of horses for shipment in the last year, amounting to 75 or 80 per cent.

The articles of wheat and flour, cattle, clover seed, and apples, though declared as exports to the United States, have almost without exception been in transit to some part of the British dominions.

In the last two years potatoes have been an important article of export, there having been over a million of bushels declared at this consulate alone in the two years. This was owing to a failure of the crop in the Northern States in 1880 and 1881. Though the crop in these States has been better this year, it is probable that the supply will be insufficient, and that large shipments will be made again this coming winter. Already some exports have been made to Pittsburgh and Elizabeth, N. J., on which shippers have found a fair margin.

In the belief that these exports will continue large, farmers are holding potatoes so high at this time as to require caution on the part of American buyers, as the cost of transportation and fifteen cents a bushel for duties must be added to the selling price in Canada, in all calculations.

Emigration to the United States from this immediate locality has progressed very steadily at about the rate of one family a day, for the past year.

Since the first of September, 1881, there have been 456 emigrants' certificates issued from this consulate. These emigrants are mostly farmers or working men, and all are of an apparently good class of people.

More than half of these certificates have been issued to women whose husbands have gone forward and secured situations in business, and sent for their families to follow them. The value of their effects is limited usually to a moderate amount; while they generally have the appearance of industrious and steady people who give fair promise of being good citizens.

The marine business at this port is done almost exclusively by means of Canadian-built and Canadian-registered vessels. Occasionally an American schooner or propeller will touch at this port to unload coal or some cargo of the kind, or take on a special shipment. But there are no lines of steamers that stop at Toronto regularly, from the upper lakes to the Saint Lawrence. The steamers that cross Lake Ontario in the summer-time belong exclusively to Canada, and are confined to a local business. There are considerable quantities of lumber and barley sent hence to Oswego and Ogdensburg by water, as well as a regular connecting trade from Ogdensburg over the Northern Railway, via Collingwood, to Chicago and westward; but this is all done in Canadian bottoms. This may not indicate any failure in trade so much as a change in its course.

WM. C. HOWELLS,
Consul.

UNITED STATES CONSULATE,
Toronto, December 4, 1882.

SALMON CATCH OF BRITISH COLUMBIA, 1882.

REPORT BY CONSUL FRANCIS, OF VICTORIA.

The season denominated "salmon-running" commenced some two weeks later than usual on the Fraser River, and it was being apprehended there would be a light run, but when it opened they came in myriads, and the canneries were barely able to manage the catch.

The first appearance of salmon in any considerable number was at the north—at Skeena and Naas Rivers, and River's Inlet—demonstrating again, that they either come from the west or north, and not from the

south, as generally supposed—although the time of their running in the Columbia and other rivers south, on the coast is several weeks earlier. The mouth of the Skeena is in latitude 54°, Naas, 54° 40′, and River's Inlet 51° 25′. At these points there are four canneries, and their season's put-up amounted to 30,000 cases. At Alert Bay, near the head of Vancouver's Island, the run was still later, and its cannery only put up 5,000 cases—2,000 less than last season. On Fraser River there were fifteen canneries in operation, the season commencing and continuing later, and their put-up amounted to 200,000 cases.

The twenty canneries of the province aggregated 265,000 cases, each containing four dozen cans, calculated at 50 pounds, giving 11,750,000 pounds, or 5,875 tons. They are rated at $5 per case, and make a showing in value of $1,175,000.

Six sailing vessels, all foreign, have been laden at this port with salmon for England, averaging 32,000 cases each. Freights were from $14 to $15 per ton. One vessel, now loading, will about exhaust the market. Over 9,000 cases have been sent to Canada and Australia, via San Francisco.

The pickled salmon during the season is estimated at 3,500 barrels; smoked and dried—excluding Indian cured in that manner for their winter food—is estimated at 40,000 pounds. The market price of pickled is $8 per barrel, and smoked or dried 8 or 10 cents per pound. The difficulty of preventing the latter contracting mold is given as a reason why they are not made more of a specialty in the salmon business.

As to labor in the canneries, with the exception of overseers and adepts in the business, Chinamen, Indians, and squaws perform most of the rough work, on wages from $30 to $40 per month. The canneries average about 60 hands, and turn out, if the supply of fish is equal to their work, from 200 to 250 cases per day.

Outside the canneries are white and Indian fishermen, who contract to furnish fish from 5 to 10 cents apiece, regardless of weight, and, as they use gill-nets, none less than 8 or 10 pounds are caught, and they frequently run up to 20 and 30 pounds.

The canneries use all modern inventions and appliances, and while every year something new facilitating canning is brought out, competition increases the price of labor and fish. An establishment capable of turning out 10,000 cases the season, costs from $12,000 to $15,000. At these figures several have started into business, and after taking everything into consideration connected therewith, footed up large profits at the close of the season. Some of the canneries average the cost of salmon per case at $2.50, others from this to $3.50, but find no difficulty in making sales at $5 per case. Up to this period, British Columbia salmon have been gaining a reputation in the markets where tried, and if their reliableness and quality are maintained, the demand for another year will be greatly in excess of canneries to supply them. In anticipation of an increased demand, three new establishments are projected for the northern coast, one of which, owned by Americans, will be located on the east side of the Prince of Wales Island, Alaska Territory. Already on its west coast, at Klawack, has there been a cannery in operation several years, doing a good business, this season putting up between 11,000 and 12,000 cases. From other fisheries in Alaska, Cook's Inlet and Kodiac Island, there has been no news since the close of the season.

That the salmon business on the coast of British Columbia and Alaska Territory can be prosecuted with profit to an almost unlimited extent is established beyond doubt. The rivers, bays, and inlets, in seasons

of running, are alive with them; they constitute, when dried, the principal winter food of the Indians, and are taken by them with spears and in traps by the thousands. At favorable points, generally at mouths of rivers and creeks, the beach is covered with poles on which they are dried in the sun. On the coast are seen many such camps, at which the Indians cure in this manner from 10 to 50 tons every season.

The coast of Alaska, should canned or pickled salmon meet in the future any considerable demand in the States, could supply the same from this one of its inexhaustible resources.

ALLEN FRANCIS,
Consul.

UNITED STATES CONSULATE,
Victoria, V. I., November 20, 1882.

CANADIAN POST-OFFICE SAVINGS BANKS.

REPORT BY COMMERCIAL AGENT CARROLL, OF PORT STANLEY AND ST. THOMAS.

The post-office savings-bank system of the Dominion, which has been in operation since April, 1868, appears to be of interest, especially at this time when Congress is looking toward the establishment of a similar system in the United States; I therefore submit a synopsis of the law and regulations governing the same, together with a brief statement of the business transacted in connection therewith up to June 30, 1882.

With a view of enlarging the facilities for the deposit of small savings, the Dominion post-office department was made available by Parliament in April, 1868, for that purpose, and savings banks were established under its auspices, the government being made directly responsible for the deposits therein, as well as for accumulated interest thereon.

Under the act, the postmaster-general has authority, with the consent of the governor in council, to direct such postmasters as he may deem proper to receive deposits, which shall be remitted daily to him at Ottawa. It is required that each deposit shall be promptly entered in the depositors' books by the postmaster and the entry attested by him as well as by the dated stamp of his office.

Upon the receipt of the deposit at Ottawa, the postmaster-general shall cause the same to be acknowledged to the depositor, which shall be conclusive evidence of the latter's claim thereto, and such interest as may from time to time accrue thereon.

In order, however, that the depositor shall run no risk during the time intervening between the deposit and the receipt of the postmaster-general's acknowledgment, the law provides that the entry in the depositor's book at the post-office of deposit shall be conclusive evidence as to his right to the deposit for ten days from the date thereof. At the expiration of this period, should the postmaster-general's acknowledgment have failed to reach the depositor, the latter may demand it, and the entry in the book in question in such case shall be conclusive evidence of his title to the amount for an additional ten days. A deposit cannot be less than $1, nor of any sum not a multiple thereof.

Money deposited cannot be seized or detained while in the hands of the postmaster-general, or while in transit to or from that officer, under legal process against the depositor.

Upon complying with certain rules the depositor or his representative

may withdraw the amount of the deposit, or any part thereof, and the authorities shall allow no unnecessary delay to ensue in this connection.

Postmasters and others connected with the post-office at which deposits are made or repaid are not allowed to disclose the names of the depositors, the amount of the deposit, or of that withdrawn, to other than the postmaster-general, or such of his officers as may be appointed in connection with the post-office savings-bank system.

All moneys deposited with the postmaster-general on account of this system are immediately paid over to the receiver-general of Canada, who credits them to the post-office savings-bank account, and all sums withdrawn by depositors or others authorized are repaid from this fund through the postmaster-general.

The interest on deposits of this character is 4 per centum and dates from the first of the month following the deposit and ceases on the first of the month in which the deposit may be withdrawn.

The accumulated interest is added to the principal and becomes part thereof on the 30th of June each year.

A report is required to be made as soon as possible after the expiration of each month to the auditor of public accounts of the moneys received and paid during the preceding month, as well as of the total amount on deposit by the postmaster-general. This statement is published in the Canada Gazette, the official organ of the government, for the information of depositors and others.

The postmaster-general is also required to render a statement to Parliament, within ten days after its following session, of the deposits received and the amount withdrawn, the expenses incurred in connection therewith, during the fiscal year preceding, together with an exhibit of the total amount due to depositors on the 30th of June as indicated.

The postmaster-general, subject to the conditions of the act, is empowered to frame regulations governing deposits and all other matters appertaining thereto. He is, however, required to submit such regulations to Parliament fourteen days after they shall have been framed, should it be in session, but if not, then fourteen days after the next ensuing session.

A deposit of any one person cannot exceed $300 in any fiscal year, excepting in special cases and by express authority of the postmaster-general. Interest is not allowed on sums over $1,000 during any period.

A depositor, upon making his first deposit, is required to give his name in full, and his vocation and residence, to the postmaster or other officer of the post-office department, and to make and sign the declaration provided by law and regulations, which must be witnessed by the officer receiving the deposit or some person known to him, or by a justice of the peace.

Should the declaration or any part thereof not be true, the depositor loses all right and title to the deposit.

Depositors are not required to continue making their deposits at the original office of deposit, but may do so at any office of deposit in the Dominion; this applies to withdrawing deposits also.

In changing from one office of deposit to another, no notice to the authorities or change of pass-book is required.

Depositors are required on the anniversary of their first deposit, in each year, to forward their books to the postmaster-general in order that the entries therein may be compared with the entries in the books of his department, as well as for the purpose of adding the accumulated interest to the principal.

Books for the use of depositors are furnished free by the post-office department. No postage is charged on these books when in transit through the mails to the postmaster-general. Married women, or women who may afterwards marry, have sole control of their deposits.

The foregoing appears to be the most important features in the laws and regulations governing the post-office savings-bank system of the Dominion. From a statement showing the business of that system year by year since its establishment on the 1st of April, 1868, to June 30, 1882, prepared by Mr. J. C. Stewart, superintendent of the savings-bank system of 1882, and kindly furnished me by Mr. F. E. Ermatinger, postmaster of this city, I glean the following:

In 1868 there were eighty-one post-office savings banks. On June 30, 1882, they had increased to three hundred and eight. On June 30, 1868, the deposits amounted to $212,507, and on June 30, 1882, they had reached $6,435,989. On June 30, 1868, the amount standing to the credit of all open accounts, inclusive of interest, was $204,588.89, and on June 30, 1882, $9,473,661.53.

The business of 1882, as compared with that of 1881, shows an increase of 25,633 deposits and an increase in the amount of deposits of $2,260,947.

The number of depositors' accounts increased from 39,605 in 1881 to 51,463 in 1882, an increase of 11,858, and the balance due to depositors increased in the latter year $3,265,434.76.

The total amount of interest allowed to depositors added to their deposits since April, 1868, amounted on the 30th June, 1882, to $1,686,111.79.

The expense of maintaining the post-office savings bank, including interest allowed to depositors and all expenses of management averages about 4⅛ per centum on the balance in the hands of the government.

The total loss sustained by the government, on account of the post-office savings bank, since 1868, is $6,517.67. The cause of this loss does not appear in the report adverted to above, and I am therefore unable to explain it.

PHILIP CAROLL,
Commercial Agent.

COMMERCIAL AGENCY OF THE UNITED STATES,
Port Stanley and St. Thomas, Canada, December 11, 1882.

MANUFACTURE OF CHROMOS AND CHRISTMAS CARDS IN LEIPSIC.

REPORT BY CONSUL MONTGOMERY.

This industry may be said to be in its infancy in Leipsic, and yet it is increasing so rapidly as to justify the conclusion that it must soon assume an important position in the trade interests of this country.

There are several manufactories of these articles now in active operation in Saxony, one of the largest and most thoroughly organized of which is that of Messrs. Wezel & Naumann, the several departments of which I have recently inspected.

This special fabrique comprises a large brick building covering an area of about 6,500 square feet, situated in the immediate environs of the city, and in a most convenient locality.

The firm commenced business in the year 1872, confining themselves entirely to the making of chromos and reliefs, in which only six stone hand-presses were employed. In the course of five years their work

had prospered to such an extent as to induce them to introduce the new and popular feature of manufacturing Christmas cards. In this new enterprise their success has been astonishing, and far beyond their anticipations, evidence of which is afforded in the fact that their business in this specialty alone increased so rapidly that they were compelled to erect new buildings and to employ a large additional force of workmen to meet the demands made upon them. The present manufactory, of which I have spoken, is the result of their industry and enterprise.

Although chromos are still made by them, their principal work consists in supplying Christmas cards of every conceivable variety, design, and finish. For this purpose they give constant employment to 230 males and 210 females, and a proper idea of the present extent of their work can be formed when I mention that during this year alone they have issued from their factory 750 new, and in many cases exceptional, designs, all of which have been executed in a style and manner which reflects the highest credit upon their establishment.

There are now in use 32 quick steam presses for printing, stamping impression, &c., 2 steam lever presses, and 20 hand-presses for transferring and printing of proofs. Besides these there are 24 machines, consisting of hydraulic and others, for grinding, paper cutting, bronzing, glazing, and finishing.

The power is supplied by a steam engine equal to fifty horses, and a smaller one of less power used as an accessory. The building is lighted throughout by the electric light, enabling the work to progress, when necessary, by night as well as by day.

The operatives are employed ten hours per day, and their wages vary considerably according to their skill and experience, ranging from 5 marks, or $1.19 per week, to 55 marks, or $13 per week, the latter being paid only to artists and master machinists, &c.

The cards vary in size and shape and are exported in large quantities to England and the United States, and also to South America, the different countries of Europe, and Australia.

The mottoes or verses are printed in nine different languages, comprising English, German, French, Spanish, Italian, Bohemian, Danish, Polish, and Dutch.

In order to prepare for all future emergencies, the proprietors of this factory have established an evening school for boys, wherein they re-receive careful instruction in the special branch of the business for which they may evince a peculiar aptitude and fitness.

In this practical manner the manufacturers hope to retain always in their employ a sufficient number of experienced workmen to enable them to keep pace with such improvements in this industry as may be hereafter introduced.

As I have remarked above, all the work executed by this firm is neatly and beautifully finished and well merits the extensive patronage it now controls. For this reason, I cannot too highly recommend their establishment to the attention of the principal dealers in such goods throughout the United States.

J. EGLINTON MONTGOMERY,
Consul.

UNITED STATES CONSULATE,
Leipsic, December 8, 1882.

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VEGETABLE CULTURE IN BERMUDA.

REPORT BY CONSUL ALLEN.

Onions, potatoes, and tomatoes comprise almost the entire production and export of this colony, and give employment to the greater portion of the inhabitants, and the prosperity of the colony depends largely upon the success of the crop and the demand of the market it meets. For the past few years nearly the entire products have been shipped to the United States.

ONIONS.

It has been about twenty years since the first shipment of onions in quantities to the United States, and from that time to the present the trade from year to year has increased till the shipments now reach from 300,000 to 400,000 boxes of 50 pounds each per annum. The seed used here is grown in the Canary Islands, and is imported in the months of August and September, costing then from 60 cents to $1 per pound. It is the only seed found to answer the purpose here, as it matures earlier and produces a mild onion. Italian, Portugal, and Madeira seed has been repeatedly tried and found not to answer, being too late to command a remunerative price in the American market. The seed is sown in the months of September, October, and November, thickly in beds, the ground having been heavily manured with stable manure two or three months before sowing. The white seed is sown first, and produces the earliest crop, the shipment of which commences in March. When the plants are sufficiently large—about 6 to 8 inches high—they are transplanted into beds about 4 feet wide, the plants being set about 7 inches apart each way. The plants from the white seed can be transplanted as early as they are large enough, and the ground can be made very rich. Those from the red seed should not be transplanted before the 1st of January; and the ground requires to be only moderately manured. If transplanted too early, and the soil is too rich, the bulb is likely to split into several pieces, and is worthless. After transplanting, the soil requires to be lightened once or twice, and the weeds removed before they mature. As soon as the top begins to fall, they can be pulled, and should lie on the ground two or three days, or until the tops are wilted, when they are cut, and packed in boxes of 50 pounds each, and sent to market, and sold or delivered to an agent, who ships them on the producer's account. Much the larger portion of the crop is consigned to a few firms in New York, who have agents here to receive and ship to them, and a commission of 10 per cent. and all expenses are taken from the gross sales. All the onions are delivered at the port of shipment in boxes, ready for the market. For the past two years, the producer has been compelled by law to place his name or initials conspicuously on each package. The earliest usually command the best prices, and they are frequently pulled before they are ripe, cut, packed, and sent to market the same day. Such onions, if care is taken in

packing, as it usually is, are deceptive in appearance, and after a few days they become slack in the boxes, with long sprouts, and when opened are unsatisfactory. When the crop is large, and the market good, a large profit on the outlay is realized—an acre of ground sometimes returning $600 to $800; but the business is to a great degree hazardous, particularly when the crop is a large one, as the only market is the United States. The supply is frequently greater than the demand, and they are sold at a less price there than the shipping expenses—the planter not only losing his crop, but having something to pay besides. The colonial assembly at its last session made a grant to subsidize some steamers to run during a portion of the crop season to England, with a view of relieving the New York market, in case of an overstock there. From present appearances the crop of onions will be larger this year than that of any previous year. From 7,000 to 8,000 pounds of seed was imported, and at the present time the plants appear in fine condition. A severe drought may cause the bulbs to fill small, and largely reduce the bulk of the crop, but the indications now are that more than 400,000 boxes, of 50 pounds each, will be grown.

POTATOES.

Potatoes are more certain of finding a remunerative market than onions, but require more labor and outlay to produce them. The seed was formerly nearly all imported from the United States, but of late years has come largely from New Brunswick, Nova Scotia, and Prince Edward Island, as it can be obtained cheaper from those places and is found to answer as well. The first crop of early rose, which is usually a small one, not averaging over four barrels from one of seed, is planted in October, and is taken off in time for the second or principal crop, which is planted in January or early in February. The seed for this crop is almost wholly the red garnet, and ten from one is considered a good return, although much more is sometimes obtained. The potato requires a deep soil well manured and sheltered from the high winds, and as a large portion of the ground susceptible of cultivation is too much exposed to the winter gales, and manure in sufficient quantities is too expensive, most of the planters prefer raising onions. The ground for potatoes is usually plowed or spaded and raked, the seed cut into pieces with one or two eyes, and planted by forcing into the ground with the fingers to the depth of about four inches in rows about 20 inches apart and about 8 inches in the rows. From six to eight barrels of seed is used to the acre. When the plants are a little above the ground, the soil is lightened between the rows with a fork, and when about 6 inches high the earth from between the rows is hoed around the plants. Only one hoeing is required. The blight, or what is called the "potato disease," has been of late years more or less troublesome, and sometimes ruins the crop. The potatoes grown here, if left in the ground until fully ripe, are of a superior quality; but as a few days oftentimes make a great reduction in the market value, there is an incentive to get them to market as early as possible, and a large portion of the crop is shipped before it is ripe, not only injuring the market value, but the reputation as well. The seed of the potato planted here rapidly deteriorates, and the second crop from the red seed becomes nearly white. About 45,000 barrels were shipped from here last year, which was much the largest shipment ever made in one year.

TOMATOES.

The seed is imported every year. None is grown here. It is sown about October and transplanted in December into rows about 6 feet apart, and the plants are put about 4 feet apart in the rows. As soon as transplanted the ground around the plants is covered thickly with brush (the wild sage, which grows all over the hills, is mostly used), not only to protect it from the wind, but to keep the fruit from the ground. The brush is usually raised once by running a stick under and lifting it enough to clear the soil of weeds; no other cultivation is required. Six or seven quarts of fruit from the hill is considered a fair crop. The fruit is rolled in paper and packed in boxes of about seven quarts each. The cultivation of the tomato here seems to be decreasing from year to year. So much poor and green fruit has been shipped that its standing in market is very low, consumers preferring to use the canned instead. Within a few years an earlier and better fruit has been sent to the New York market from the Bahamas, and from present appearances the shipment of tomatoes, like that of arrowroot, will be a thing of the past.

GENERAL REMARKS.

Letters are often received at this consulate from people in the United States asking for information as to the price of land, the amount it will produce, the price of labor, cost of living, &c., with a view of removing here. To all such inquirers I can offer no inducement for them to come, for the reason that land cannot be purchased, except at a high price, say, from £30 to £40 sterling per acre, and then not more than one-eighth is susceptible of cultivation. The whole area of the islands only comprises the amount of territory contained in one-half a township in the State of New York, or 18 square miles. The price of labor is low, a farm hand only getting £2 per month and board, or 3*s.* per day and board himself. Very few of the planters who own their land and work hard accumulate much property, as the crops and market are so precarious; one bad year will take away all they can make in a good year, and, perhaps, leave them in debt. A large share of the planters are without much means and live by credit till they sell their crop, and then after paying their debts have nothing left, and are obliged again to seek credit on the strength of the next crop. The price of living is high, unless one is willing to live as the poorer classes do, and content themselves with none of the luxuries and the very minimum of the necessaries of life.

CHAS. M. ALLEN,
Consul.

UNITED STATES CONSULATE,
Hamilton, Bermuda, January 17, 1883.

WINE HARVESTS OF FRANCE, 1835–1883.

REPORT BY CONSUL ROOSEVELT, OF BORDEAUX.

From statistical information I am enabled to give a tabulated statement of the wine production in the department of the Gironde since 1835, and also of the entire harvest of France for the same period.

HARVESTS.

Year.	In the Gironde.	In all France.	Year.	In the Gironde.	In all France.
	Hectoliters.	*Hectoliters.*		*Hectoliters.*	*Hectoliters.*
1835	1,156,752	26,476,000	1864	2,794,663	50,653,000
1840	2,163,381	45,486,000	1865	3,068,000	68,943,000
1845	1,228,784	30,140,000	1866	3,214,824	63,838,000
1847	2,318,820	54,316,000	1867	1,869,028	38,869,479
1848	1,990,800	51,622,152	1868	3,711,341	50,109,504
1849	1,423,611	35,555,000	1869	4,540,289	71,375,965
1850	2,296,559	44,717,553	1870	3,399,034	53,537,942
1851	1,798,450	39,429,229	1871	2,578,979	56,901,017
1852	1,263,643	28,460,601	1872	2,798,855	50,122,708
1853	726,589	22,661,717	1873	1,241,389	35,716,619
1854	319,892	10,789,869	1874	5,123,643	63,074,564
1855	538,227	15,275,000	1875	5,279,410	83,836,391
1856	662,405	21,294,000	1876	1,961,045	41,846,748
1857	1,073,781	35,400,000	1877	3,511,094	56,405,363
1858	1,881,593	46,805,000	1878	2,210,114	48,720,553
1859	768,578	29,891,000	1879	1,567,506	25,769,552
1860	1,631,531	39,558,000	1880	1,660,235	29,677,472
1861	1,082,312	29,738,000	1881	1,276,000	34,138,715
1862	1,454,441	37,110,000	1882	1,114,932	30,886,352
1863	2,213,671	51,372,000			

Spring frosts, drought in summer, peronospora, oïdium, mildew, cold autumns, humidity, and fogs, but more than all the phylloxera, reduced the promise of a full harvest in 1882 to 30,886,352 hectoliters. This is a small yield, viewing that the consumption, distillation, vinegars, and exportation absorb nearly 40,000,000 hectoliters. To make good this enormous deficit the wine dealers have no other alternative than recourse to foreign wines. As the wine harvest of Italy for 1882 was a most abundant one, France will draw largely from that quarter, and what was once Italian wine will soon be converted by French manipulation into vin ordinaire, fine clarets, &c.

According to the average production of the last ten years, the harvest of 1882 should have been 47,274,717 hectoliters; instead, there is a deficit of 16,388,365 hectoliters. This falling off in the harvest shows the obstinate nature of the plague which is destroying the vineyards. From 1852 to 1857 vine culture in France was pursued under most distressing circumstances. The oïdium fiercely attacked the vines, and through its ravages the yield was reduced to 10,789,869 hectoliters, making the poorest harvest of the century. The year of 1866 will be long remembered in France, on account of the terrible ravages of the phylloxera, in consequence of which the harvest of 1867 was reduced to 38,869,479 hectoliters. After this followed several years of abundant crops, and in 1875 was produced the largest harvest that has ever filled the cellars of the wine-growers.

In 1879 and 1880 the yield descended below 30,000,000 hectoliters. Despite deplorable climatic influences and phylloxera, 1881 and 1882

show a slow but decided progress. It is hoped that science or the vine-growers themselves will discover some method to stop the ravages of the terrible parasite which destroys the vines. In the mean time, constant care of the affected vines and replacing those that are destroyed by healthy, vigorous American vines will in a great measure check the progress of this fatal enemy and once more restore the vineyards.

GEO. W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, January 25, 1883.

WHEAT HARVEST OF FRANCE, 1882.

REPORT BY CONSUL WILSON, OF NANTES.

I have the honor to herewith transmit a report upon the wheat harvest of 1882. The figures, in some places, are taken from the official returns, and those are supposed to be correct. Many are not so taken, and can only be estimated; but because I had found these estimates collated from the latest intelligence, I deemed it wise to gather from the official returns such as seemed pertinent, and forward all to the Department, as the subject is one of great interest to the agricultural industry of the United States.

I.—ALL FRANCE.

Estimates of wheat harvest.

Quality of crop.	Number departments.	Average crop.	Crop of 1882.
		Hectoliters.	*Hectoliters.*
Very good	17	18, 850, 000	25, 000, 000
Good	37	41, 840, 000	48, 000, 000
Average	20	30, 550, 000	30, 000, 000
Mediocre	12	10, 960, 000	9, 000, 000
Bad	1	6, 000, 000	400, 000
Total	87	102, 800, 000	112, 400, 000

NOTE.—A hectoliter=a quintal=100 kilograms=220.4 pounds=2.75 bushels. (Rev. Stat., sec. 3570.)

The crop of 1881 was 96,000,000 hectoliters, equal to 264,000,000 bushels. The average crop is equal to 282,823,360 bushels. The present crop is equal to 309,234,880 bushels, an increase this year, above the average, of 27,000,000 bushels, and above 1881, of 45,000,000 bushels; but by reason of light weight it is estimated that it will make no more bread than an average crop.

The average weight per hectoliter is given at 77.500 kilos; for crop of 1882, 74 kilograms. The average production of flour, 74 per cent.; for crop of 1882, 70 per cent.; average production of bread, 130 kilograms for every 100 kilograms of flour; for 1882, 127 kilograms. And from this formula it is estimated that the crop of 1882 will produce but 73,943,200 kilograms of bread, while the average crop (27,000,000 less) has produced 76,296,220 kilograms of bread.

The production and importation of wheat into France for ten years last past are given in the following table:

Year.	Production.	Importations.
	Hectoliters.	*Hectoliters.*
1872–'73	120, 803, 459	.....
1873–'74	81, 892, 667	14, 966, 932
1874–'75	133, 130, 163	.....
1875–'76	100, 634, 861	1, 020, 481
1876–'77	95, 419, 832	178, 903
1877–'78	100, 145, 615	6, 850, 995
1878–'79	95, 270, 000	29, 117, 177
1879–'80	79, 355, 866	29, 116, 294
1880–'81	99, 471, 559	21, 324, 395
1881–'82	96, 810, 956	16, 307, 374

II.—OF NANTES.

Prior to 1878–'79, Nantes was a great exporting center, her imports being but little, and none from the United States. Since then she has changed her position and now ranks third city in the republic in her imports of wheat, which come principally from the United States.

Wheat and grain commerce of Nantes since 1878.

IMPORTATIONS.

Year.	Wheat imported from United States.	Wheat from all other countries.	Total wheat imported.	Importation of flour and of all grains other than wheat.	Total importation, flour and grain of all kinds.
	Hectoliters.	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*
1878	374, 424	40, 753	415, 377	6, 757	422, 134
1879	1, 058, 417	55, 196	1, 116, 613	119, 072	1, 235, 685
1880	1, 152, 188	10, 963	1, 163, 151	114, 532	1, 277, 683
1881	443, 764	60, 229	503, 993	1, 231	506, 224
1882	354, 244	70, 804	425, 044	(*)	(*)

* Not yet completed.

EXPORTATIONS.

Year.	Wheat to all other countries.	All grains and flour other than wheat.	Total grains and flour to all countries.
	Hectoliters.	*Hectoliters.*	*Hectoliters.*
1878	1, 050	148, 109	149, 159
1879	140	74, 449	74, 589
1880	601	183, 717	184, 318
1881	11, 162	331, 807	342, 969
1882	11	*	*

* Not yet completed.

The last two columns in the two preceding tables show the total foreign commerce in grain and flour of all kinds to and from the port of

Nantes and the mouth of the Loire. The exportations are home production, and consist principally of barley to England, rye and buckwheat to Belgium, Holland, and Germany.

III.—WHEAT PRICES.

It may not be uninteresting to the farmers and millers of the United States, who furnish the grain and flour exports, to know the price and production (outcome) of a given quantity of wheat *as calculated* in the great grain market of Paris.

One hundred hectoliters of wheat will produce (estimated) as follows:

		Francs.
68	hectoliters first quality flour, at 36.45 francs per hectoliter, 100 kilograms	2,478.60
3	hectoliters second quality flour, at 30 francs	90.00
3	hectoliters third and fourth quality flour, at 22 francs	66.00
22	hectoliters bran, &c., at 13.50 francs	297.00
1½	hectoliters screening, at 14 francs	21.00
2½	hectoliters evaporation, loss	
100	hectoliters gross price	2,952.60
	Deductions:	
	Discount on sale of flour one-half of one per cent	13.17
	Transportation to Paris	65.00
	Cost of 43 flour sacks	65.00
		143.17
	Net proceeds	2,809.43

100 hectoliters = 10,000 kilograms = 22,000 pounds, which produced, francs, 2,809.43, at 5 francs to the dollar, equals $561.88; 22,000 pounds at $561.88 = 2.55 cents per pound American money in Paris.

IV.—WHEAT HARVEST OF THE WORLD.

The following is an estimate, from the latest authorities as gathered in Paris, of the harvest of the entire commercial world, of 1882, compared with that of 1881:

Countries.	1881.	1882.
	Hectoliters.	*Hectoliters.*
France	96,000,000	112,000,000
Germany	37,000,000	50,000,000
Austria	35,000,000	48,000,000
England	34,000,000	40,000,000
Belgium	8,000,000	10,000,000
Spain	40,000,000	30,000,000
Italy	35,000,000	54,000,000
Portugal	3,000,000	2,000,000
Russia	71,000,000	93,000,000
Roumania	8,000,000	13,000,000
Turkey	13,000,000	18,000,000
United States	130,000,000	170,000,000
Australia	6,000,000	5,000,000
India	6,000,000	7,000,000
Canada	6,000,000	6,000,000
Algeria	5,000,000	10,000,000
Divers	10,000,000	12,000,000
Totals	543,000,000	680,000,000

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, October 17, 1882.

DANISH HARVEST OF 1882.

REPORT BY CONSUL HENRY D. RYDER.

I have the honor to hand a report on the results of the harvest in this country for the year 1882, as compiled from the different districts.

Throughout the year the unvarying rich appearance of the fields in all parts of the country had tended to lead to a generally expressed opinion that the harvest would be an abundant one, and it is certainly many years since the grass and corn have yielded such favorable results; but nevertheless in this, the same as in former damp seasons, the yield of the ears will prove to be smaller than was expected, and the harvest, without doubt, for the entire country and for its chief products cannot be reckoned an unusually abundant one, but rather as being somewhat above an average; and when it is taken into account that the quality of the grain in many parts is reported as less good, and that the grain prices are at present in a generally depressed state, it is thus doubtful if the outcome, as a whole, will much exceed an average.

In seeking for the ground of the harvest having turned out less favorably than had for so long been anticipated, it may, in the first place, be attributed to the strong weather which prevailed in the latter days of July and the commencement of August, which caused considerable damage, especially in the north of Jutland; and again to the rainy period which occurred during the middle of the harvesting season. On the other hand, damage from grubs and insects does not seem to have been very prevalent this year. In only some few districts complaints are reported, as also of rust in the wheat in some few more.

The extent to which the harvest has been above or below that of an average yield—1 standing for average.

Districts	Wheat.	Rye.	Barley.	Oats.	Mixed seeds.	Pease.	Beans.	Green fodder.	Roots	Potatoes.	Field hay.	Meadow hay.
Copenhagen	1.43	1.04	1.19	1.39	1.32	1.00	1.50	1.44	1.12	0.50	1.42	1.39
Frederiksborg	1.20	1.18	1.36	1.21	1.32	0.94	0.50	1.50	1.14	0.71	1.50	1.22
Holbok	1.33	0.92	1.35	1.35	1.20	1.08	1.20	1.50	1.25	0.62	1.46	1.25
Sorö	1.25	1.00	1.19	1.23	1.35	0.86	1.00	1.41	1.12	0.63	1.46	1.15
Prosto	1.40	1.15	1.32	1.26	1.30	0.93	1.00	1.42	1.30	0.61	1.41	1.25
Maribo	1.41	0.94	1.13	1.38	1.30	1.06	1.07	1.40	1.13	0.72	1.38	1.33
Odense	1.38	0.93	1.37	1.30	1.36	1.10	1.25	1.44	1.27	0.81	1.20	1.47
Svendborg	1.38	1.04	1.33	1.42	1.41	1.20	1.50	1.39	1.21	0.71	1.33	1.17
Bornholm	1.16	1.14	1.14	1.21	1.08	1.00	.....	1.50	1.14	0.71	1.43	1.36
Hjorring	1.00	1.09	1.27	1.27	1.29	1.25	.....	.....	1.14	0.60	1.38	1.41
Aalborg	1.25	0.88	1.26	1.42	1.50	1.25	.....	1.00	1.13	0.64	1.27	1.25
Ringkjobing	.....	1.28	1.07	1.21	1.10	.....	.....	1.37	1.33	0.57	1.38	1.28
Viborg	1.00	0.93	1.21	1.25	1.38	1.00	.....	1.50	1.31	0.61	1.45	1.43
Randers	1.50	1.08	1.44	1.42	1.48	1.00	1.00	1.50	1.14	0.58	1.41	1.47
Aarhus	1.31	1.00	1.27	1.32	1.50	1.10	1.50	1.50	1.25	0.59	1.32	1.30
Thisted	.....	1.00	1.27	1.00	1.44	0.83	.....	1.00	1.30	0.55	1.50	1.31
Veile	1.28	1.00	1.27	1.41	1.28	0.66	1.50	1.50	1.17	0.60	1.35	1.22
Ribe	1.17	1.09	1.26	1.23	1.44	0.87	...	1.50	1.29	0.65	1.50	1.32
Average	1.28	1.04	1.27	1.29	1.33	1.01	1.18	1.40	1.21	0.63	1.39	1.31

With regard to the several products the following observations may be made. Wheat this year, as compared with the foregoing, shows a favorable result. It is only the exception where from a few districts it is returned as being under the average. Specially it has given a good yield in those parts of the country where it is chiefly cultivated, such as Falster Lottam and the southern part of Zealand. The sort which seems to have succeeded best this year, is that known by the name of square-head wheat.

Rye taken as a whole shows less favorable results than wheat, and this is specially referable to the Aalborg and Viborg districts, where this description of cereal plays a considerable part. This sort of grain whilst filling largely in stack, has given a comparatively smaller yield in the ear, but taking it all in all may be placed as one of fair average.

Barley, from all the districts, is reported as "above an average," and would appear to have given a very good return, especially in regard to quantity. The quality is, however, less satisfactory, owing to its having suffered considerably from the unfavorable weather during harvest season.

Oats have likewise in most places yielded very well, and from all the districts those which return the same as "above an average" are in the majority. Solely from the Thisted district are the unfavorable returns to be found equally as numerous as the favorable ones.

For mixed seeds the favorable returns from all the districts are most in the ascendant; and the same may also be said to be the case, and even to a greater extent, with regard to green fodder.

Pease and beans have been less satisfactory, and from many places this is attributed to the damage sustained during harvesting time, during which a large part of the seed fell from the pods.

Roots in all districts are returned as "above an average"; and more especially have sugar beets given a very good yield. There is, however, a pretty general complaint that a strikingly large number of roots have run to seed without its being possible to account in any way for the same.

Potatoes, the most important branch of root culture throughout the country, has, however, on the other hand, given but a poor yield, frequently approaching to a failure. The main cause of this, and chiefly so far as the northern districts of Jutland are concerned, seems to be attributed to the storms in the month of August, which destroyed the tops, thereby checking the growth of the tubers. The potato disease has also shown itself over a large area of the country. In the islands the yield would appear to be somewhat more favorable than in Jutland; and the Jutland districts which have been the greatest sufferers would seem to be those of Thisted. Ringkjobing, Aarhus, and Randers.

As a matter of very considerable importance to the agricultural interests of this country, it is pleasing to observe that the grass and hay harvest have been remarkably good this year. From all parts of the country, without exception, the very favorable returns are to be found in a decided majority, both with regard to field as well as to meadow hay. On the whole, perhaps field hay is somewhat in advance of meadow, with the exception of Odense, Hjorning, and Randers districts, where the opposite is the case.

In North Schleswig the outcome of the year's harvest seems to have been the same as for that of the kingdom—wheat being the best, then oats, barley, and rye.

The following table will show the earliest and latest periods of harvesting operations in all the districts of the country:

Districts.	Earliest date of harvest.	Latest date of harvest.
Copenhagen	August 19	September 19.
Frederiksborg	August 26	September 13.
Holbok	August 21	September 12.
Sorö	August 29	September 20.
Prastö	September 2	September 14.
Maribo	August 23	September 7.
Odense	August 19	September 17.
Svendborg	August 18	September 10.
Hjorring	September 9	September 26.
Aalborg	September 3	September 23.
Ringkjobing	August 29	September 21.
Viborg	September 6	September 23.
Randers	September 3	September 23.
Aarhus	September 11	September 20.
Veile	September 7	September 19.
Ribe	August 28	September 14.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, December 16, 1882.

YERBA-MATÉ OR PARAGUAY-TEA.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

I am in receipt of a number of letters from parties in the United States making inquiries in regard to what is known in South America as Yerba-maté or Paraguay-tea; some requesting me to send specimens of the article for trial, others asking in reference to the possibility of cultivating the plant in the United States, and others still desiring to be informed if it would pay to import it as an article of commerce. I have answered some of these letters, but it may serve a better purpose for me to communicate what I know in regard to the matter in the form of a report to the Department of State, through which medium it will secure a larger publicity.

DEMAND FOR THE TEA IN THE ARGENTINE REPUBLIC.

I would premise by stating that the article referred to forms one of the largest items in the foreign commerce of the Argentine Republic, and occupies pretty much the same place in the household economy here that tea or coffee does at home. The demand for it which exists in this country (to say nothing of Chili, Bolivia, Peru, and Brazil, where it is perhaps even more generally used) will be readily seen from the custom-house returns.

Besides the large quantities which are produced in the Argentine territory of Misiones, the following table, compiled from figures obtained from the National Statistical Reports,* shows the quantities and values of the imports of Yerba-maté into the country during the years named:

*Estadiction del Comercio Exterior de la Republic Argentina, 1876–81.

Imports of Yerba-maté.

Year.	From Paraguay.		From Brazil.	
	Amount.	Value.	Amount.	Value.
	Kilograms.		*Kilograms.*	
1876	1,607,368	$547,407	6,650,054	$1,090,112
1877	2,815,190	421,814	8,826,174	1,037,667
1878	2,828,135	419,645	6,411,846	749,262
1879	3,061,030	516,419	10,170,666	1,266,088
1880	4,951,555	628,140	9,019,510	1,064,827
1881	5,173,277	691,193	8,354,413	1,075,867

By way of comparison, I would state that during the same time the following were the imports of the Chinese tea and of coffee into the Argentine Republic:

Year.	Imports of tea.		Imports of coffee.	
	Amount.	Value.	Amount.	Value.
	Kilograms.		*Kilograms.*	
1876	195,199	$189,940	1,245,097	$314,381
1877	312,876	296,015	1,288,525	375,505
1878	195,915	189,306	1,401,202	421,943
1879	307,564	301,977	1,456,381	446,299
1880	280,806	274,549	1,804,784	498,568
1881	2-8,948	272,858	1,886,553	538,356

It will be seen by these figures that the amount of Yerba-maté imported into the Argentine Republic every year is about six times greater than the total amount of tea and coffee combined, and that the value of the same is twice as great as that of both together, to say nothing of the amount which is produced in the country, amounting to perhaps half as much again, thus entitling it to be called the Argentine national beverage.

WHAT IS YERBA-MATÉ?

This yerba-maté* (*Ilex Paraguayensis*, De Candolle; *Ilex maté*, Aug. St. Hilaire; *Peoralia glandulosa*, Limé) is a species of holly, and grows in abundance between the twentieth and thirtieth degrees of south latitude, but especially in the neighborhoods of the Upper Parana and Uraguay Rivers. It is a tree of the size and appearance of the orange; but more delicate, and, like it, it retains its leaves during the entire year. The leaf is oval, not so long as that of the orange, of a dark-green color of metallic brightness, with very marked veins. The blossom is not very conspicuous and leaves behind it a berry containing small seeds of fatty albumen.

Like all other trees of the holly family, the maté contains a bitter element, and to this slight bitterness is added a peculiar and rather agreeable aroma, both in the leaves and in the young twigs. These are the parts of the tree or shrub which, when gathered and dried, are known as *yerba-maté*, and which is so generally used as a drink or tea throughout this part of South America. This beverage is not a discovery made by the Spaniards, who settled the country, but it seems to have been used by the Indian tribes, "since time whereof the memory of man runneth not to the contrary." The Guerany Indians, who in early times inhabited the banks of the Uruguay and Parana Rivers, imparted the secret to their conquerors, who were not slow in appreciating its virtues

and adopting its use, until it has become a leading article of commerce and has its place with the lares and penates of every native household.

WHERE IT COMES FROM.

The yerba-maté, as an article of commerce, comes from three principal sources, to wit: Paraguay, the Brazilian province of San Paulo, and the Argentine territory Misiones. The most highly esteemed comes from Paraguay, the next is that from Misiones, while the yerba of San Paulo, shipped from Paranaguá occupies the lowest rank. Formerly, and especially during the time that Jesuits had their seat in this country, the harvesting was done with particular care, the Indians under their direction separating the leaves according to their different degrees of development, and laboriously removing the little twigs and the stems and ribs of the leaves. In fact, it was in many places cultivated artificially and the different missions had their own plantings of *yerboles*, the trees being carefully tended and protected. Thus they gave more abundant harvests and the leaves ripened more completely.

But all the formerly cultivated *yerboles* have disappeared, and those that remain in the deep forests of the Upper Parana are, many of them, quite worn out.

Only in Paraguay has the old method been even partially continued; and the yerba-maté from there, although much dearer in price, is really more economical, as it is stronger and more aromatic.

PARAGUAY MATÉ.

In Paraguay the government has the monopoly of the sale of all the yerba-maté which is produced in the country.

The *yerboles* are spread over almost the entire surface of the republic; but the most famous now are those of Tacuru-pucú, a desert sort of a place not far from the great falls of the Upper Parana River and the southern slopes of the Sierra de Maracayú. It is gathered and cured, sometimes under the superintendence of the government officials of the departments in which it is found, and sometimes by private individuals who receive permission to work on prescribed conditions and deliver the produce to the government.

In the more remote places, and especially in the neighborhood of hostile Indians, the Paraguayan Government generally employs its soldiers in the work of harvesting the yerba-maté. When worked by officials, the workmen are drafted from the neighborhood, as for any other public work, and are paid in cured yerba, or in goods, such as wearing apparel, &c., with which the government keeps itself supplied for that purpose, and on which it gains the usual percentage. When worked by individuals, the general rule is to allow them one-third of the yerba cured, they paying all expenses.

ARGENTINE MATÉ.

The *yerboles* of the "Misiones," now under cultivation and worked, are for the most part situated in the deep bend which the Uruguay River makes towards the northwest of the province of Rio Grande do Sul, belonging to Brazil; but there are others equally productive in the neighborhood of the village of San Xavier, from which place the yerba-maté is sent to Itaquay, a somewhat important town on the Uruguay, whence it comes by river to this port.

* Description geographique et statistique de la confederation Argentine; par V. Martin de Moussy; vol. 1, pp. 428 *et seq.*

As the Argentine Government makes no proprietary claim to the product, the *yerboles* of Western Misiones are all worked by individuals, who have no further concern for them than to make all they can out of their labor. Were the forests better protected from spoliation by the government, the industry, now that Misiones has been organized under a territorial government, might acquire a great development.

HARVESTING OF THE YERBA.

The harvesting of the yerba-maté is a very simple process. Before commencing the work the patron or superintendent selects his location, having in view the quantity of material and the facility of transportation, and erects the necessary buildings, consisting generally of a shed 50 or 60 feet in length for storing the goods and provisions that he may have, and the yerba that he collects; also a number of small huts or dwellings for the workmen, and the frames (barbracuas) upon which the material is dried. These are constructed of poles and withes, from 15 to 20 feet square, with arched or angular roofs, and firm, even floors, made of clay, extending 6 or 8 feet beyond the frames on all sides, for the convenience of pulverizing the material after it is dried. Near each *barbracua* is erected a stand or elevated seat from which the foreman may watch the drying process and make such changes in the disposition of the material as he may deem necessary. Each workman climbs a tree and with a large knife or *facon* cuts off all the small branches bearing leaves until the tree is quite stripped. These branches, made up into small bundles, are borne to the drying frame and lightly heaped on top. Under this is then lighted a clear though not very hot fire, under the influence of which the yerba-maté is gradually dried.

It is important that the brush used for fuel should contain no bad element, but on the contrary should be aromatic, upon which the quality of the yerba, in a great measure, depends.

This toasting process occupies from thirty-six to forty-eight hours, the fires being kept up from daylight till 7 or 8 o'clock p. m. If it rains upon the material while in process of drying, it is necessary to spread it out and re-dry it; and yerba which has been so made is not considered so good for preservation and is generally sold for home consumption. When the drying process is completed, the fire is removed and the floor is swept off, and the dry material, being worked through the frame, falls to the floor and is pounded with flat wooden instruments, until reduced to the condition of a coarse powder, and it is gradually removed to the storehouse as it becomes so.

Sometimes it is pounded in a wooden mortar, or it is put through a sort of crushing mill, which consists of a circular stone, worked in a trough by a mule or horse. The yerba is then packed in hide bales, made by cutting the raw hide even, doubling it lengthwise, and sewing up the sides with hide thongs. These bales are first softened in water and are then packed with the yerba, which is done by settling it well with a heavy wooden pestle, and gradually closing up the open end until the bale will contain no more. The hide then, contracting as it dries, increases greatly the compactness of the whole, and it is ready for transportation. These bales are termed *tercios*, the larger ones containing from 200 to 250 English pounds. They are loaded either on horseback or in carts, according to the localities, and sent to the ports of shipment on the rivers.

The workmen are paid at the rate of about 25 cents per arroba (25 pounds) for the cured yerba, as it is brought from the *barbracua*, and a packer makes about 6 cents per arroba, the hide being found by the employer.

Where the *yerboles* are worked by private parties the gatherers of the yerba sell their crop of the day to the proprietors of the crushing mills, which are generally established near by.

The packing of the yerba in hides, which requires particular care, is done principally in the neighboring towns or in establishments made especially for the purpose.

I would state that the leaf of the yerba-maté, or the tree, is evergreen; can be gathered all the year round; it is better, however, at the end of summer, though very little notice is taken of this circumstance.

The greater portion of the yerba-maté produced in the southern provinces of Brazil is exported from the port of Paranagua, on the Atlantic coast. In Paraguay no yerba-maté is permitted to be exported, except from the city of Asuncion, as the trade is a monopoly of the government and the greatest source of its national resources. It comes down in the river boats either to this city or Montevideo, whence what is not required for local consumptions find a market elsewhere.

The duty on yerba-maté imported into the Argentine Republic is six cents per kilogram on the customs valuation, which is thirteen cents per kilogram on that imported from Brazil, and fifteen cents on that from Paraguay.

HOW YERBA-MATÉ IS USED.

As I have stated, the use of the yerba-maté is general among the native population of the Argentine Republic, as well as of all the adjacent countries.

While coffee and Chinese tea are to some extent adopted by them in Buenos Ayres, in the interior the universal beverage is Paraguayan tea; and in many cases foreigners who have lived in the country for years become equally fond of the drink. The taste, however, is, to a great extent, an acquired one, and most Europeans who live here prefer the Chinese tea.

In Paraguay the yerba-maté is almost exclusively made use of, and even in the interior of Brazil, in spite of the fact that coffee is the leading article of production, there seems to be a preference for yerba-maté.*

The analysis shows that yerba-maté contains *caffeine*, the principle existing both in coffee and Chinese tea, and it is claimed that it not only possesses the mildly exhilarating qualities of the Chinese plant "which cheers but not inebriates," but that it also has other virtues which make it more valuable as a tonic or strengthening beverage. Indeed, when used to excess, it even produces a kind of intoxication. The preparation of the beverage, though very simple, is very different from that of tea. A small spoonful or pinch of the powdered yerba is placed in a kind of gourd, which is called a maté, and in which is previously inserted the *bombilla*, a silver tube, the lower bulb of which is pierced with very small holes (small, to keep the powder from passing in), and which serves to *suck* the liquid. Water boiling hot is then poured in, and the tea is

* Some attempts to cultivate Chinese tea in São Paulo and Minas proved a sad failure, as the quality produced was a very inferior one; whether from the effects of the climate or bad management I cannot tell. Certainly the patient, slender-fingered son of the "Celestial Empire" seems to be better suited to the subtle work of gathering and sorting the leaves than the negro. But they have an excellent equivalent for it in Brazil, the Paraguay tea (*Ilex Paraguayensis*), also called "herva-maté" or "congonha," growing wild everywhere in the southern provinces of Brazil, and forming already a considerable article of export. An infusion of the dried and pounded leaves, imbibed through a delicately plaited little tube (*bombilla*), is the indispensable natural beverage of all classes, &c. (The Amazon and Madeira Rivers: Sketches and Descriptions from the Note-book of an Explorer, by Frank Keiler, Engineer, London, 1874.)

ready for use. The true amateurs of the beverage, in the country principally, take their maté without sugar (*mate amargo*). In the city, however, it is taken with powdered sugar, which is put into the gourd each time that it is replenished. It is also sometimes flavored with orange or lemon. The maté is imbibed very much as we would take a "sherry cobbler," though the process is considerably slower from the fact that it is taken very hot, and it requires great care for an inexperienced person to keep from scalding his tongue and throat. When tepid the maté loses its aroma and becomes insipid. Some of these maté cups are beautifully worked in figures and bound in silver, while the *bombillas* are also handsomely wrought, the whole costing many dollars.

In nearly all native houses the maté circulates almost continuously all day long. It is the offering made to all guests, and the same maté cup and tube do service for all who are present, each one as the cup is replenished taking turns at the *bombilla*. To refuse to take maté when offered would be considered rude, if not an insult to country hospitality.

Many persons, especially ladies, give themselves up to the use of maté, drinking it in excessive quantities, and thus contracting a lazy habit which, as I am informed, in time weakens the digestive organs, causing loss of appetite, and consequently debilitating the vital economy.

In traveling, however, its virtues are very conspicuous, since by its use hunger is in a remarkable manner postponed. An Argentine *gaucho*, for instance, will take a maté or two in the early morning, and gallop his horse all day long, requiring nothing more in the way of food or drink until nightfall, when he will break his fast with the only "square" meal of the day.

So, too, with the drivers of the long caravans of bullock carts, which traverse the limitless pampas, laden with wool and hides for Buenos Ayres, or with return cargoes of assorted merchandise for the country stores (*pulperias*). Before breaking camp in the morning, all hands will indulge in a general round of maté drinking, and they will not make a halt for refreshments until they go into camp again at nightfall, when they will partake of a benevolent dinner of beef or mutton, killed on the spot and roasted on spits in front of their camp-fires. But inveterate maté drinking is not confined to old ladies and the denizens of the pampas. It has "come down from a former generation" as a sort of official institution which has become venerable with time and must not be interfered with. And every day, in all the public offices, both of the nation and of the province, the hours of siesta* are set apart to a great extent for an indiscriminate bout at the maté cup, all employés, from the grave minister of government to the porter who guards the door, taking their turns at the *bombilla*, much to the delay, sometimes, of those who have business to be dispatched.† The habit of maté drinking is easily acquired, and I do not hesitate to say that it

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* "Siesta" is the hottest part of the day, and the time for napping, generally from 1 to 3 o'clock, but it is not so universally indulged in here as in the "camp." In many places business is entirely suspended during these hours.

† I have before me the Prensa, a newspaper of this city, of the date of November 29, which, in an article on "official abuses," is quite severe on this habit of official maté drinking. I translate the following paragraph:

"In the public offices the official only attends the public from 2 to 3 o'clock or from 3 to 4, in order that nobody may interrupt him at the hour of taking maté. When maté is suppressed in the public offices the government houses will lose the aspect of town grog-shops (*despachos de aldea*), and the administration of business will gain much in promptitude and regularity. Messieurs Ministers and Chiefs of Bureaus, we denounce maté as a grand conspirator against the public interests, and especially against labor in the public offices."

is very agreeable, especially in the morning, upon rising, or in the middle of the day, between meals. There is no doubt, however, that it weakens the appetite if it is taken before eating; but even Chinese tea will do that.

CAN THE PLANT BE ACCLIMATIZED IN THE UNITED STATES?

So much for the yerba-maté—its growth, its harvesting, its marketing, and its use in the Argentine Republic.

The question now recurs, in answer to the various letters I have received on the subject, whether it would be feasible to undertake to introduce this Paraguayan tea, either by acclimatizing the plant or by importing the product, as an article of domestic use into the United States.

1. Can the plant (*Ilex P.*) be grown in the United States? In my opinion there is no reason why it would not thrive in any of the extreme Southern States and in California. The success of the Jesuits in establishing artificial *yerboles* at Yapecú proves that it will flourish in the thirtieth degree of south latitude, and I do not see why it could not be cultivated up to an equal latitude in the United States. I have seen it stated that the plant has been tested on the island of Martin Garcia, opposite Buenos Ayres, in the river Plate, and M. de Monssey, the French savant, to whose investigations I am indebted for much information on the subject, thinks its cultivation could be undertaken anywhere in the Argentine Republic as far south as the Province of Corrientes with success. I am informed that the yerba grows perfectly well from the seed, but it is delicate for the first few years, and needs the best of care and arbor culture. But, from what I have seen of the yerba forests of Paraguay, I should judge that when once well set there would be no further trouble so far as the plantations are concerned, but whether the leaf would retain its delicate aroma and other essential qualities under different conditions and surroundings is a question which can only be solved by actual experiment. The plant, however, seems to prefer a subtropical climate, and I would not advise any one to undertake its cultivation on a grand scale in the United States without first experimenting with it; and even if its cultivation were attempted, it might result as the various schemes for introducing the Chinese plant have done.

2. I would therefore suggest to parties who are desirous of attempting the inauguration of the use of yerba-maté in the United States that they confine themselves for the present to the importation of the article. There is no difficulty in the way of doing this. The article is so securely packed in hide bales that it will stand any amount of hard handling without detriment, while the steamers leaving this port for New York, to say nothing of sailing vessels if preferred, would deliver it in less than a month from the date of shipment.

The price of the yerba in this market is 16 cents per pound for that from Paranagua (Brazil), and 32 cents for that from Paraguay. Where it is purchased in quantities (in the *tercios*) it can be obtained for $4.60 to $4.80 per arroba of 25 pounds, and in bags at $2.20 to $2.80 per arroba. That from Brazil, in barrels, sells for about $2.50 per arroba.

It must be borne in mind, however, by those who propose to engage in the trade, that they will have to educate their customers into the manner of preparing the tea, and especially into the mysteries of the maté gourd and the tube. Indeed, perhaps they would have to order a ship-

ment of the articles in question along with the maté, since they are entirely unknown to the trade in the United States.

Any further correspondence on the subject will be duly turned over by me to those who deal in the yerba.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, November 30, 1882.

SWITZERLAND, ITS PEOPLE, INDUSTRIES, AND TRADE.

REPORT BY CONSUL-GENERAL CRAMER, OF BERNE.

AMERICAN GRAIN IN SWITZERLAND.

In my dispatch of September 5, 1882, concerning the importation into Switzerland of American grain, I stated that it is a well-known fact that Switzerland does not produce a sufficient quantity of breadstuffs to supply the demand of its inhabitants.

The truth of this statement becomes evident—1, by a study of the "table," given below, "of the population and superficial area of Switzerland," in which it is shown by figures that its productive soil, including its vineyards, meadows, and pastures, is comparatively small; and 2, by a study of the "*table*," also given below, "showing the amount of imports into Switzerland of various kinds of cereals during the years 1879, 1880, and 1881."

I desire to refer here again to the suggestions I made in the dispatch referred to concerning the propriety of American grain exporters cultivating Switzerland as a market for some of their business operations.

It is true that Switzerland derives a large part of the support of its inhabitants from the raising of cattle, &c., and the products of its many dairies, as will be seen by a glance at the table given below, showing the number and value of horses, cattle, sheep, hogs, &c., according to the latest enumeration and valuation, made in 1876.

SWISS INDUSTRIES.

A large class of the inhabitants of Switzerland is, however, dependent upon the cultivation of various industries and the export of the products of these industries. The principal are the manufacture of gold and silver watches and of watch materials of various kinds, of cotton and woolen goods, of laces and embroideries, of silk stuffs and silk ribbons. As our consuls in different parts of Switzerland have, during the past few years, furnished reports on the nature, progress, and extent of these industries, it is not necessary to repeat here what they have so well said therein.

Wood carving—There is, however, one branch of industry cultivated in Switzerland which has as yet received little attention from our consular corps, and that is wood-carving. Hence, a brief sketch thereof may not be altogether out of place here. Next to its admirable communal system and the thrift of its people, the prosperity of Switzerland is in great measure due to the efforts that are being constantly put forth to supplement agriculture by industry. Where the soil is fertile and the climate genial, agriculture can stand alone, and the peasantry, though their holdings may be small, are generally well-to-do. But in mountainous regions, such as the Jura and Bernese Oberland, families possessing no more than 10 or 15 acres of not very rich land, and with

no other resource than husbandry, find it hard to live, for the Swiss, unlike their French neighbors, are prone to indulge in the luxury of large families. It is a suggested fact that while the Vaudois and the Neuchatelois are little given to emigration, the emigration from some parts of Berne is so extensive as to threaten them with depopulation. This arises from no difference in the laws or social conditions prevalent in the three cantons, but from the circumstance that for generations past the mountaineers of the Jura have combined handiwork with husbandry, while with few exceptions the mountaineers of the Oberland have put their trust in husbandry alone.

Despite the difficulty of creating new trades in a country destitute of coal and iron and hemmed in by hostile tariffs, the Bernese began some years since to emulate the example of their neighbors, and their efforts, to all appearance, are likely to be crowned with success. These efforts are directed chiefly to the development of what may be called the natural industries of the canton, such as wood-carving, marqueterie-making, and the production of artistic furniture.

The first attempt to introduce wood-carving into Berne was made half a century ago by Christian Fischer, of Brienz, who may be called the father of the art, for after acquiring it himself he taught it to others and founded a school. Besides being an artist in wood, Fischer taught music, made musical boxes, and practised the healing art, but like many other clever fellows, he died in poverty. Some time after Fischer began wood-carving at Brienz a certain Peter Baumann began at Grindelwald the making of the miniature Swiss châlets which are now so popular. He afterwards removed to Meyringen, where he taught his art to his three sons, one of whom, Andreas, proved to be a genius of the first order, and was equally distinguished for originality in design and skill in execution. He was the first to practice carving in relief. His roses are still regarded as masterpieces, and serve as models for young sculptors.

The success of the Baumanns encouraged others to follow their example, and wood-carving soon became a winter occupation in nearly every cottage of the valley of the Hasle. But the sale of carvings and châlets being restricted to foreign tourists in the summer season, principally through the intermediary of hotel porters, the trade for a long while was limited and unremunerative. But it struggled on, and in the course of time attracted the attention of local capitalists, who started workshops, opened depots for the sale of their products, and began an export trade which, with some fluctuations, goes on steadily increasing. The business of wood-carving now finds employment for several thousand individuals. In one establishment alone, that of the Brothers Worth, three to four hundred sculptors of both sexes are regularly occupied.

Each has his or her specialty, the choice of which is left to individual taste. Some have an aptitude for and excel in the modeling of groups of animals; others give their attention to flowers and plants; others again prefer to carve ornamental caskets and build miniature châlets. The women have great delicacy of touch, and their work, in certain branches, is preferred to that of the men. One thing leads to another, and the abundance of certain sorts of wood in the district suggested the idea of adding to wood-carving the production of what may be called fancy furniture, carved chairs and tables, napkin rings, and such like articles.

A factory has also been started at Interlaken, and is now in successful operation, for making habitable châlets on a large scale. You have only to select your design, give the order, and all the parts of a châlet

are sent to any destination, so arranged and marked that an intelligent joiner can put them together, and you have a handsome and picturesque house which you may live in as long as you like and even carry about on your travels.

Another trade which has lately sprung up in the Bernese Oberland is the making of slabs, table-tops, and other articles from the indigenous marbles and granites of the district. A beautiful red stone, soft at first, but which on exposure to the air becomes as hard as adamant, is extensively used for these purposes, and when artistically inlaid with black and white marble is much sought by amateurs of marqueterie. Parqueterie is also becoming an extensive manufacture. The quantity turned out annually is estimated at 700,000 square feet, and the value of the wood carvings executed by the sculptors of the Oberland reaches a yearly total of two millions of francs.

The number of artisans engaged in the trade is 25,000, and their earnings range from two to five francs per day. The headquarters of the trade are Brienz, in the district of Interlaken, and Meyringen, in the district of Oberhasle, but many of the people work at their own homes, in remote valleys. At Brienz there is an excellent school of design, supported partly by the communes and partly by the canton, and the sculptors of Interlaken enjoy the services of a "master modeler," paid by the state. These industries have already done much to promote the prosperity of the districts in which they are carried on, and if they make the same progress in the future as in the past, they will soon take rank with the more important special trades of the confederation.

INDUSTRY OF FOREIGNERS.

Another source of income to the Switzers is what they themselves call "*fremden industrie*," or "the industry of foreigners"; that is, from travelers. For many years there has been every summer a large influx of foreigners from all parts of the world. They come for the purpose either of seeking a restoration of health, or of enjoying the magnificent Alpine and lake scenery, or of climbing the Alps, or of spending the summer months in retired leisure. In consequence of this fact, a large number of expensive hotels have been built in various parts of Switzerland, in order to accommodate the traveling public. As thus hotels are open only from three to five months in the year, their "charges" are necessarily high; otherwise there would be little or no profit realized on the capital invested.

Still many millions of francs flow annually into Switzerland from the pockets of travelers, and thousands of persons find remunerative employment in this "branch of industry."

Of course the different railway companies of Switzerland derive also a large revenue from foreign travelers during the spring and summer months. Were it not for this fact several railroads would have an income scarcely sufficient to pay their running expenses. Three classes of carriages are used on Swiss railroads. The tariffs are, for first class, 3¾ cents per English mile; second class, 2¾ cents; and third class, half of first class. No trains are running after 11 o'clock at night. All baggage above 20 pounds must be inscribed and paid for.

POPULATION AND AREA.

The following table shows the population and superficial area of the different cantons of Switzerland:

Table of population and superficial area of Switzerland.

Cantons.	Population in 1880.	Total superficial area.	Productive land.						Unproductive lands.							
			Forests.	Vineyards.	Productive soil, meadows, grazing lands, &c.	Total.	Proportion of total superficial area.	Glacie.	Lakes.	Cities, villages, and outer buildings.	Area of railroads, turnpikes, &c.	Rivers and brooks.	Rocks and rocky wastes.	Total.	Proportion of the total superficial area.
		Sq. kil.	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Per ct.*	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Sq. kil.*	*Per cent.*
Zurich	317,576	1,724.7	521.7	41.5	1,052.8	1,616.0	93.70	.....	75.7	12.5		20.5		108.7	6.30
Berne	532,164	6,889.0	1,344.4	8.2	4,033.1	5,385.7	78.18	288.5	122.7	32.9	6.8	1,059.2	40.5	1,503.3	21.82
Lucerne	134,806	1,500.8	306.0	0.6	1,062.4	1,369.0	91.22	.....	65.3	6.4	1.7	12.8	457.3	131.8	8.78
Uri	23,694	1,076.0	64.4	.....	413.3	477.7	44.40	114.8	20.2	0.8	3.9	3.5	175.1	598.3	55.60
Schwyz	51,235	908.5	122.4	2.9	534.9	660.2	72.67	1.3	54.3	2.8	1.1	10.9	41.8	248.3	27.33
Unterwalden-le-Haut	15,356	474.8	109.0	.....	290.4	399.4	84.12	10.8	11.3	1.1	0.9	10.1	34.4	75.4	15.88
Unterwalden-le-Bas	11,992	290.5	72.0	.....	145.9	217.9	75.01	3.5	32.1	0.5	1.1	1.0	191.8	72.6	24.99
Glaris	34,213	691.2	123.8	.....	324.8	448.6	64.90	36.1	7.1	1.8	1.0	4.7	6.9	242.6	35.10
Zoug	22,994	239.2	32.0	0.1	161.6	194.0	81.23	.....	33.9	1.2	8.0	1.9	47.6	44.9	18.77
Fribourg	115,400	1,669.0	276.9	2.8	1,189.9	1,469.6	88.05	.....	16.8	8.0		74.3		199.4	11.95
Soleure	80,424	783.6	248.8	0.7	472.3	717.8	91.60	.....	10.2	2.4	4.3	7.6	0.2	63.8	8.40
Bâle-Ville	65,001	35.8	3.9	0.7	25.8	30.4	84.92	.....	.....	1.9	7.4	1.2	9.6	5.4	15.08
Bâle-Campagne	59,271	421.6	134.1	7.3	264.2	405.6	96.20	.....	.....	1.3		0.8	1.0	16.0	3.80
Schaffhouse	38,348	294.2	114.3	10.6	156.1	281.0	95.51	.....	.....	2.1	0.8	2.7		13.2	4.49
Appenzell Rhodes, Extérieures	51,958	260.6	38.3	0.1	215.2	253.6	97.31	0.1	0.1	0.8	0.5	1.1	4.1	7.0	2.69
Appenzell Rhodes, Intérieures	12,841	159.0	18.7	.....	125.7	144.4	90.82	1.0	0.5	0.6	9.2	0.5	11.5	14.6	9.18
St. Galle	210,491	2,019.0	331.2	7.3	1,375.0	1,713.0	84.17	7.4	76.8	13.1	2.1	19.5	179.5	305.5	15.13
Grisons	94,991	7,184.8	1,260.0	3.2	2,588.4	3,851.6	33.61	359.2	15.1	7.2	8.5	2,943.2		3,333.2	46.39
Argovie	198,645	1,404.0	425.9	25.2	890.6	1,341.7	95.56	.....	8.6	15.8	11.9	19.1	775.6	62.3	4.44
Thurgovie	99,552	988.0	191.1	19.0	625.5	835.6	84.87	.....	130.6	9.0	3.8	9.0	6.9	152.4	15.43
Tessin	130,777	2,818.4	486.4	79.7	1,313.9	1,880.0	66.70	34.0	66.4	9.4	6.8	46.2	2.5	938.4	33.30
Vaud	238,730	3,222.8	684.0	55.8	1,989.0	2,728.8	84.67	11.2	405.5	15.3	29.5	30.9	1,800.0	494.0	15.33
Valais	100,216	5,247.1	625.3	11.4	1,773.2	2,409.9	45.93	971.7	17.4	5.7	10.2	32.2		2,837.2	54.07
Neuchâel	103,732	807.8	162.6	12.5	397.2	572.3	70.85	.....	95.5	4.0	7.2	128.8		235.5	29.15
Genève	101,595	279.4	21.0	14.8	197.1	232.9	83.36	.....	30.0	4.9	3.5	7.1	1.	46.5	16.64

FOREIGN TRADE.

A large export and import business is carried on with all parts of the orld.

The Switzers must import a large per cent. of what they eat and wear. Grain, flour, &c., are imported from Hungary, cotton, petroleum and machinery from the United States, raw silk from Italy, China, and Japan, and every pound of coal for fuel and motive power from Germany. But, on the other hand, the value of the exports of Switzerland is larger than the value of her imports. She sends her silks and silk ribbons, her fine watches, her embroideries and braided straws, her butter and cheese, to almost every quarter of the globe, though her exports have to contend with a high tariff in almost every large country.

The fact that a large per cent. of breadstuffs have to be imported into Switzerland renders it no longer a cheap country to live in. Hence it is a mistake for Americans to come here under the impression of being able to live cheaply.

The following table shows the amount of importation into Switzerland of various kinds of cereals:

Table showing the amount of importation into Switzerland of various kinds of cereals.

	1879.	1880.	1881.
	*Q. M.**	*Q. M.**	*Q. M.**
Cereals and dry vegetables	3,395,389	3,570,093	3,207,948
Wheat	2,535,432	2,794,196	2,464,962
Rye	52,544	27,888	24,647
Oats	317,197	278,370	243,622
Barley	165,103	160,519	163,235
Maize	305,301	227,373	294,792
Beans	12,397	12,731	9,675
Peas	2,866	3,483	2,221
Other kinds	4,549	5,533	4,774
Peeled barley	41,965	41,781	56,164
Rice	72,936	72,092	73,810
Bran	29,991	27,411	27,772
Rural boundary trade, free of duty:			
Cereals in sheaves	1,836	2,071	1,865
Trade with Pays de Gex:			
Cereals in sheaves	291	2,926	130

*Quinteaux métrique = 100 kilograms, or 200 pounds.

LABOR IN SWITZERLAND.

The laborer and peasant of Switzerland have in many respects a rather hard time of it. Since the influx of foreign tourists has assumed such large proportions during the past twenty years, the cost of living has greatly increased, while the wages of the laborers remain stationary, and the few acres of ground of the peasants refuse to yield a larger harvest.

Rents in cities and towns, the cost of wine, meats, flour, and bread, which during the past twenty-five years have all risen at least 50 per cent., present no attractive side for men who have to work for 50 or 60 cents a day.

They generally live in crowded and poorly ventilated houses, perhaps warm enough, but almost bare of furniture and comfort. If they can have meat once or twice a week, they consider themselves happy. They are badly off, for the reason that they have to work hard, live poorly, and are seldom able to save anything. But notwithstanding all this, he is happy in his way; he loves his country, with its institutions; reads,

is intelligent; and knows that intelligence and industry, and not bayonets, preserve the peace in Switzerland. As to the peasants, or small farmers, they seldom live on farms, but in clusters of houses, villages, and towns. The reason thereof is that his land is seldom in *one* piece, but is cut up in small pieces of from one-quarter of an acre to a whole acre, and scattered for miles in different directions. The peasants are early risers, industrious, simple, and economical in their habits. As in Germany and France, so in Switzerland, the women work in the fields beside the men. In fact, the women are generally quicker and more industrious than the men, and the economical principle in the former is more developed than in the latter, for these like to frequent the beer and wine saloons, and spend some of their daily earnings, or of the proceeds of their fields. They generally possess a Yankee's desire for money, but lack his shrewdness as to the ways of making and saving it. Their cares are few, and like their income, rather light. They mow their hay, herd their few cows and goats, prune their vines, and leave the outcome of their work to time and Providence. Their taxes are comparatively light, and yet the majority of these little farmers are never out of debt.

Politically they are conservative democrats, loving home rule, and disliking centralization. Whether they pay as much attention to the breeding of horses, cattle, &c., as they should is an open question.

The following "table" shows the number and value of horses, cattle, sheep, hogs, bee-hives, &c., in Switzerland in 1876:

Table showing the number and value of horses, &c., cattle, sheep, hogs, bee-hives, &c., in Switzerland in 1876.

Cantons.	Horses.	Their total value.	Mules and asses.	Total value.	Cattle.	Total value.	Hogs.	Total value.	Sheep.	Total value.	Goats.	Total value.	Bee-hives.	Total value.	Grand total value.
	No.	*Francs.*	*No.*	*Francs.*	*No.*	*Francs.*	*No.*	*Francs.*	*No.*	*Francs.*	*No.*	*Francs.*	*No.*	*Francs.*	*Francs.*
Zurich	5,625	2,812,500	9	1,560	74,627	19,505,609	22,695	1,060,690	1,428	21,420	19,623	235,476	15,418	185,016	23,822,262
Berne	28,601	14,300,500	117	30,780	216,702	52,148,950	76,088	3,316,780	78,889	1,183,335	83,220	998,640	39,226	470,712	72,449,697
Lucerne	5,225	2,612,500	15	4,980	70,739	17,417,200	35,750	1,060,620	8,841	132,615	15,718	188,616	16,097	193,164	21,609,695
Uri	526	263,000	2	160	9,220	2,123,000	2,002	88,725	8,594	28,910	10,711	128,532	383	4,596	2,736,923
Schwyz	1,171	585,500	12	5,580	25,922	5,864,700	5,099	211,550	6,478	97,170	7,844	94,128	2,015	24,180	6,882,808
Unterwalden-le-Haut	361	180,500	7	1,400	9,624	2,152,400	2,582	85,420	3,332	50,280	5,225	62,700	622	7,464	2,540,164
Unterwalden-le-Bas	162	81,000	1	500	6,258	1,566,200	1,707	58,540	737	11,055	1,456	17,472	472	5,664	1,740,431
Glaris	399	199,500	2	160	9,606	2,351,800	2,957	100,775	2,003	30,045	6,935	83,220	814	9,768	2,775,268
Zoug	511	255,500	7	980	8,074	2,179,200	1,919	89,125	538	8,070	823	9,876	1,857	22,284	2,565,035
Fribourg	8,753	4,376,500	152	42,820	64,515	14,844,460	24,278	977,475	20,966	314,490	12,320	147,840	8,490	101,880	20,805,405
Soleure	2,962	1,491,000	17	3,040	28,918	7,406,150	10,520	449,910	4,253	63,795	10,198	122,376	7,254	87,048	9,623,319
Bâle-Ville	1,213	606,500	.....	.....	1,961	578,950	592	28,900	244	3,660	293	3,516	228	2,736	1,224,262
Bâle-Campagne	2,085	1,042,500	5	400	14,739	4,005,950	3,906	185,605	2,806	42,090	4,817	57,804	5,152	61,824	5,396,173
Shaffhouse	1,044	522,000	.....	.....	9,060	2,480,300	5,948	250,500	57	855	4,232	50,784	1,427	17,124	3,321,563
Appenzell-Rhodes, Extérieures	759	379,500	18	6,060	17,244	4,494,300	3,660	127,770	973	14,595	2,975	35,700	2,206	26,472	5,084,397
Appenzell-Rhodes, Intérieures	172	86,000	1	500	7,733	1,952,750	3,447	109,840	757	11,355	4,022	48,260	471	5,652	2,214,361
St. Galle	5,217	2,608,500	72	11,640	72,668	18,240,650	14,351	574,260	14,346	215,190	21,732	260,784	9,158	109,896	22,020,920
Grisons	3,411	1,705,500	53	10,960	78,075	16,914,800	19,622	775,825	82,878	1,243,170	47,368	592,416	5,915	70,980	21,313,651
Argovie	3,796	1,898,000	11	1,720	62,295	15,878,750	20,826	996,500	1,390	20,850	13,839	166,068	14,629	175,548	19,137,436
Thurgovie	3,005	1,502,500	7	2,240	35,677	10,124,550	7,892	353,300	1,860	27,900	7,872	94,464	6,290	111,480	12,216,434
Tessin	1,222	611,000	940	230,600	44,188	10,806,350	8,793	335,980	21,702	325,530	63,435	761,220	3,342	40,104	13,110,784
Vaud	16,801	8,400,500	286	68,240	77,243	19,586,350	41,879	1,905,230	42,396	635,790	16,460	197,520	23,067	276,804	31,070,434
Valais	1,912	956,000	3,138	1,262,820	65,024	15,403,300	12,224	439,070	57,614	864,210	28,728	344,736	3,748	44,976	19,315,112
Neuchâtel	3,009	1,504,500	152	29,300	19,469	5,158,950	3,433	157,335	3,586	53,790	2,853	34,236	4,723	56,676	6,994,867
Genève	2,973	1,486,500	234	25,020	6,249	2,038,600	2,345	102,795	871	13,065	1,356	16,272	1,821	21,852	3,704,104
Total	100,935	50,467,500	5,258	1,741,540	1,035,930	255,224,150	334,515	13,842,520	367,549	5,513,235	396,055	4,752,660	177,825	2,133,900	333,675,505

HOW TO INCREASE AMERICAN TRADE.

Switzerland, as a market for our various export articles, has not yet been cultivated to its fullest extent. I see no reason why the total value of the articles exported from the United States to Switzerland should not ultimately reach the total value of the exports from Switzerland to the United States. I believe that under existing circumstances grain and flour can be as cheaply exported from the United States to Switzerland, via New York or Philadelphia and Antwerp, as from Russia and Hungary. Were exporters to club together, organize a depot in a central or convenient locality in Switzerland, managed by a competent gentleman, and keep on hand an assortment of all kinds of agricultural machinery, implements, tools, all kinds of woolen and cotton goods, boots, shoes, &c., while an efficient agent is traveling throughout Switzerland, showing samples thereof, as far as possible, and soliciting orders, I believe that our exports to Switzerland could by this method be quadrupled in a few years. There is nothing like earnest endeavor and enterprise.

M. J. CRAMER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Berne, January 10, 1883.

THE WINE TRADE OF RHEIMS WITH THE UNITED STATES.

REPORT BY CONSUL FRISBIE.

THE VINTAGE OF 1882.

As stated in my last report on this subject, the vintage of 1882, which gave such flattering prospects in the spring, proved a bad failure by reason of the continued cold, rainy weather which prevailed during the months of June, July, August, and September, preventing the grapes from ripening and destroying the saccharine matter.

The juice expressed from the grapes could hardly be called wine of even a fair second quality, as it did not exceed from eight to ten degrees by the *glucoenomètre salleron*, which must be considered a wine of very ordinary strength, as a good wine should give from twelve and a half to thirteen degrees, and in very good years as much as fourteen degrees. The wine also had much acidity and was quite unsatisfactory in bouquet.

In consequence of the bad vintage but few of the champagne houses are bottling any of the wine, and those who are doing anything in that way are operating with much caution and doing but very little, and the great bulk of the product of the vineyards will be left on the hands of the vine-growers, to be made into common table wine, which will entail great loss and inconvenience to them.

Many of the large champagne sparkling wine manufacturers, whose custom is to manufacture many thousands of bottles annually, will not attempt the production of a single bottle of sparkling wine from the vintage of 1882.

With the exception of a few of the most favorably located vineyards, the product of the vintage has been such in quality as to render it totally unfit for use in the manufacture of sparkling wine, and in the few cases

excepted the quality is only sufficient for the production of a sparkling wine of second or third grade.

The quantity of the product of the vintage did not exceed one half of a usual yield, say about 30,000 hectoliters, but as the quality was so universally bad, the diminished quantity was not so very much regretted.

It is now estimated that the quantity of sparkling champagne wine stored in cellars and caves, from the vintage of other years, of all grades, much of which is really fine wine, is in the neighborhood of 60,000,000 bottles; while a good vintage for 1882 was much required in order to prevent a rise in present prices, there appears to be a sufficient stock on hand to supply the market for three or four years with passably good wine, even against a possible failure of the vintage for 1883.

CHAMPAGNE TRADE WITH THE UNITED STATES.

There has been for the past few years a steady and increasing demand in the United States for the sparkling wine of Champagne, and nearly all the champagne wine houses are turning their attention to its importance, and endeavoring to secure a share of the business, and some of the houses have already established a colossal trade.

The following table is an exhibit of the exportation of sparkling champagne wine in quantity and value to the United States during the nine years last past:

Years.	Number of cases.	Shipments computed in quart bottles.	Value in United States gold.
1874	184,007	2,208,084	$2,088,294 14
1875	164,350	1,972,200	1,829,271 13
1876	142,343	1,708,116	1,556,997 32
1877	125,048	1,500,576	1,370,322 90
1878	126,018	1,512,216	1,427,522 99
1879	165,518	1,986,216	1,806,831 13
1880	202,909	2,434,908	2,338,830 38
1881	255,866	3,070,398	3,092,120 18
1882	277,047	3,324,564	3,362,910 00

Always feeling a deep interest in my country's progress and prosperity, and consequently being at all times ready and anxious to do what I can in communicating information that shall be of interest and value to my countrymen, of whatever class or profession in business, I have considered that it would be acceptable to the Department and of interest and benefit to the wine trade of the United States for me to prepare a table to accompany this report, giving specifically all the information possible regarding the present status of the champagne wine trade with the United States.

With this view and aim in mind I have, at the expense of much time and labor, prepared the accompanying tabulated report, showing the names of all shippers, their respective places of business and post-office address, the amount of sparkling wine shipped by each, and the value thereof in United States money, for each month, and the total thereof, and the grand totals of the whole for the year 1882. I have designed this table as a tableure, "figuratively speaking," of the whole business, from which all interested in the subject may obtain any information desired that may be expressed in this manner.

If I be judged to have succeeded in this I shall feel amply repaid for the time and trouble which its preparation has occasioned me.

MISCELLANEOUS SHIPMENTS.

The following table is an exhibit of the miscellaneous exportations from within this consular district to the United States for the year 1882. It will be observed that willow, raw and manufactured, is the leading article, nearly all of which is produced in the department of Aisne:

Articles.	Value.
Buttons and trimmings	$11,076 13
Corks	400 00
Corsets	1,335 06
Fancy goods	2,781 02
Hats and hatters' goods	1,441 57
Machinery	2,200 20
Merinos, cashmeres, and miscellaneous dress goods	14,189 11
Miscellaneous articles	7,115 91
Sirups	534 80
Willow, raw and manufactured	58,367 66
Total	*99,441 46

*Increase of $64,590.95 over 1881, which was $34,850.51.

JOHN L. FRISBIE,
Consul.

UNITED STATES CONSULATE,
Rheims, France, January 2, 1883.

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*Statement showing the declared export of champagne sparkling wine from the consular district of Rheims, France (which embraces with in its jurisdiction the entire district known as Champagne), in amount and value to the United States for the year 1882, together with the names of shippers, their respective places of business and post-office address, and the amount and value shipped by each.**

Shippers.	Place of business and post-office address.	Total number of cases shipped by each shipper during the year 1882.	Total shipment computed in quart bottles.	Total values in United States gold.
G. H. Mumm & Co	Rheims	83,573	1,002,876	$855,377 40
Kunkelmann & Co	Rheims	45,510	546,120	518,670 00
Pommery & Greno	Rheims	32,039	384,468	523,678 58
Werle & Co	Rheims	16,332	195,984	249,354 30
L. Roederer	Rheims	21,115	253,380	209,020 03
Heidsieck & Co	Rheims	8,369	100,428	121,181 80
Jules Mumm	Rheims	4,804	57,648	36,538 00
George Goulet & Co	Rheims	8,362	100,344	93,553 84
Giesler & Co	Avize	5,091	61,092	71,879 00
Chandon & Co	Epernay	5,417	65,004	75,673 60
B Delbeck & Co	Rheims	4,211	50,532	40,664 11
Deutz & Geldermann	Ay	2,974	35,688	31,876 95
Bouché Fils & Co	Mareuil-sur-Ay	5,814	69,768	57,222 61
Charles Heidsieck	Rheims	2,985	35,820	26,673 36
F. C. Jaunay	Rheims	1,240	14,880	16,924 40
A. de Montebello & Co	Mareuil-sur-Ay	2,609	31,308	34,467 15
J. Bollinger	Ay-Champagne	805	9,660	10,620 00
Krug & Co	Rheims	4,596	55,152	53,074 73
Gallice & Co	Epernay	1,495	17,940	20,768 70
Ernest Irroy & Co	Rheims	1,451	17,412	23,619 20

*It was not practicable to publish Consul Frisbie's very interesting and valuable report in its entirety. It is thought, however, that in the above form all substantial information is retained, and that the omission of shipments by the months does not detract from the usefulness of the table.

Statement showing the declared export of champagne, &c.—Continued.

Shippers.	Place of business and post-office address.	Total number of cases shipped by each shipper during the year 1882.	Total shipment computed in quart bottles.	Total values in United States gold.
Gustave Gibert	Rheims	862	10,344	$9,399 20
Arthur Rœderer	Rheims	1,532	18,384	32,001 86
Ayala & Co	Ay	1,366	16,392	17,219 00
Moquet & Co	Rheims	676	8,112	6,738 60
Boshamer, Léon & Co	Bordeaux	168	2,016	2,684 41
Freminet & Co	Chalons-sur-Marne	25	300	186 00
Eugene Clicquot	Rheims	798	9,576	7,520 30
Chausson Frères	Epernay	6	72	76 80
Henriot & Co	Rheims	2,170	26,040	17,810 28
Boll & Co	Rheims	571	6,852	7,992 50
G. Preller & Co	Bordeaux	6	72	151 60
De Venoge & Co	Epernay	3,153	37,836	21,996 66
E. Merciere & Co	Epernay	100	1,200	1,210 80
Bruch, Foucher & Co	Mareuil-sur-Ay	266	3,192	2,553 60
August Soyez & Fils	Rheims	24	288	150 00
Dagonet & Fils	Chalons-sur-Marne	127	1,524	1,668 94
Ruinart & Fils	Rheims	280	3,360	3,238 00
A. Morizet	Rheims	97	1,164	1,314 00
Wachater & Co	Epernay	555	6,660	9,746 25
Al. Dumas & Co	Rheims	1	12	19 20
Duming & Co	Ay	930	11,160	12,243 00
W. Eyber & Co	Bordeaux	115	1,380	1,488 00
I. Champion	Rheims	366	4,392	3,060 40
J. Perrier, Fils & Co	Chalons-sur-Marne	257	3,084	1,5[illegible]20
Binet, Fils & Co	Rheims	455	5,460	5,2[illegible]36
V. Morelle & Co	Rheims	157	1,884	1,607 58
G. Dubedat	Bordeaux	65	780	404 87
Adrien & Fils	Chalons-sur-Marne	25	300	219 78
Charles Loche	Rheims	90	1,080	1,090 00
Theophile Rœderer	Rheims	276	3,312	3,272 50
Perinet & Fils	Rheims	499	5,988	5,298 24
Jules Fournier	Epernay	200	2,400	900 00
Eckel & Tafel	Epernay	140	1,680	1,174 76
B. & E. Perrier	Chalons-sur-Marne	96	1,152	1,096 00
T. Duchatel-Ohaus	Rheims	50	600	445 00
De Selby & Co	Paris	45	540	385 20
Arnold & Heidelberger	Rheims	456	5,472	7,019 00
Vix Bara	Avize	266	3,192	2,092 60
Col. Roger & Co	Epernay	100	1,200	1,275 00
A. Thomas & Co	Epernay	25	300	250 00
J. Rabaine	Bordeaux	5	60	117 76
Valore Mortier	Lacaussade	4	48	55 00
Laronde Frères	Bordeaux	4	48	81 38
Adolph Collin	Chalons-sur-Marne	26	313	209 60
Faber Frères	Ay-Champagne	100	1,200	1,106 50
M. Roussey	Rheims	30	360	228 00
Lanson, Père & Fils	Rheims	30	360	315 96
Forest & Belleau	Rheims	5	60	31 20
L. M. Canneaux & Fils	Mareuil-sur-Ay	546	6,552	5,229 65
Bouvet-Ladubay	Epernay	109	1,308	966 70
Total		277,047	3,324,564	3,362,940 00

THE SWISS TELEGRAPH.

REPORT BY CONSUL BEAUCHAMP, OF ST. GALLE.

GENERAL OBSERVATIONS.

The first continental telegraphic line was opened between Berlin and Aix-la-Chapelle in 1849.

In the last-named place Julius Reuter established a telegraph office, extending the line by "pigeon communication" as far as Verviers, in Belgium. The Paris Bourse and other important news was received at

Verviers by post-dispatch and forwarded by carrier pigeon to Aix-la-Chapelle and from thence by telegraph to Berlin, where, of course, the latest stock exchange news was of the greatest financial importance to the bankers and brokers.

The news in a short space of time was distributed from Berlin to other neighboring cities and villages, and in like manner was the news gathered from the more eastern points of Germany, Austria, and Russia, and distributed throughout Western Europe. The "gap" in the direct communication with Paris between Quievrechain and Valenciennes was supplied by Mr. Reuter by a "courier system." This stretch, however, was soon supplied by the progress of electricity, and when in 1851 the first cable was laid from Calais to Dover, which opened up the London Stock Exchange to continental capitalists, it was believed that the goddess of commerce and communication had about performed her mission. All-important was this service to the commercial world, and in this stroke alone Reuter achieved a great name for himself. The grounding of the political telegraphic service for the press, however, seems to have been the crowning of his success. The first great political event thus heralded was on the 1st of January, 1859, in giving an account of the memorable address of Napoleon III to the Austrian ambassador, Baron Hübner, which was the forerunner to the Italian war. The speech, which was delivered at the Tuileries at 1 o'clock in the afternoon, was received and forwarded by Reuter's office so that the London Times, in a third edition, was able to furnish the speech to its readers in its entirety by 3 o'clock of the same day. Through this great feat Reuter stormed the citadel, and his reputation forever afterwards was established, and confidence will always be placed in the Reuter dispatches.

The Italian war opened up a new field of operation. Special correspondents at enormous costs were sent to the theater of war, and the details of every battle were dispatched with such speed and promptness, through Reuter's office, that the public had implicit confidence in their authority. At the outbreak of our civil war there were not only special correspondents sent to the United States from London, but other herculean efforts were made by Reuter to expedite the transmission of war news to the British public, the continent of Europe, and the far East. In the year 1864, the business, which had grown to such extraordinary proportions by connecting the old and new world with the Atlantic cable, and the telegraphic network encircling almost the whole world, was transferred by Reuter to a joint-stock company. Reuter, however, for many years controlled its direction. Reuter's agency has for its foundation the great capacity for gathering the earliest news and transmitting them with the greatest possible speed, never accepting anything unless its authority can be vouched for. It is an absolute rule, and positive instructions are given to all agents to transmit all political news free from bias or political coloring to any party. It therefore follows that its entire freedom from all political parties, and its maxim "that news which is not the first in the field is no news at all," has made it the most powerful and reliable authority known to-day; and the public accepts it as such.

SWISS TELEGRAPHY.

The Swiss Government has a great pride in its electric telegraph system, and claims to be the model of Europe. Berne contains the central bureau through which all instructions are issued relative to international telegraphy, made so by telegraph conventions held at Paris, Vienna, Rome, and St. Petersburg. These conventions, however, do not pre-

vent each kingdom from fixing its own internal tariffs and regulations, but are simply rules for the interchange and transmission of telegraph messages between the various countries of the world.

It is claimed that the world is not only indebted to this little mountain republic for the example of an excellent and cheap internal system, but for the suggestion of this central administration, where all international matters could be conducted.

LAWS.

Article 1. The Swiss Government reserves to itself the exclusive right to construct electric telegraphs, and to make concessions within the territory.

Article 2 provides that offices will be opened whenever commercial or political importance requires it and a sufficient amount is subscribed by the inhabitants to defray a proportional cost in their establishment.

Article 3, in giving equal rights to the use of the electric telegraph, provides that preference in dispatches will be given to matters relating to the railroad service and to federal and cantonal authorities.

Article 4 invests the federal council with supreme authority in all telegraph matters, and the source from which officials shall receive their instructions.

Article 5 provides that the federal council shall have the right to negotiate all telegraph treaties or conventions with foreign nations, appoint commissioners, and issue instructions. The ratification must be made by the federal assembly. In some cases, however, where good grounds and an emergency exists, the federal council may perfect the convention.

Article 6 provides that propositions to create permanent officials with fixed salaries shall come before the federal assembly; also that the federal assembly may employ workmen (construction hands and skilled artisans for setting apparatus) and temporary officials, and to fix their salaries.

Article 7 reserves the right to nominate all telegraph officials, but may transfer certain authority to the higher officials with regard to the disposition of their subordinates.

Article 8 also reserves the right to designate lines to be constructed, and the points where offices shall be opened, and to designate their class.

Article 9 gives immediate executive control over all telegraph matters to the department of posts and construction, requiring that reports be made from time to time by said department to the federal council, giving in detail all matters relating to the telegraph and the effect of the laws.

Article 10 empowers the department of posts and construction to require a central director or surveyor, whose duty it is to assume the active management. The federal council, however, reserves the right to appoint him from among the other telegraph officials.

Article 11 provides that the central director shall be provided with an office and a secretary, a comptroller, where the dispatches will be inspected and the accounts of the management shall be kept.

Article 12 divides the telegraph system into districts, with inspectors subordinate to the chief director at Berne.

Article 13 stipulates that in telegraph districts where a larger or smaller number is employed in a bureau, the person who is the most competent in the telegraph service, whether he be a post official or not, shall be required to assume the duties of the office. In large offices

where many operators are employed, one from among the number shall be selected as chief of the bureau.

THE WORKING OF THE LAWS.

In Switzerland at the close of the year 1881 the official report shows, in round numbers, that 1,000 telegraph offices of the first, second, and third classes were in operation, and 105 by the various railroads.

Offices in operation at the end of—

1852	34
1853	70
1854	90
1855	97
1856	107
1857	120
1858	126
1859	131
1860	145
1861	157
1862	177
1863	200
1870	546
1875	1,002
1876	1,053
1877	1,080
1878	1,091
1879	1,104
1880	1,108
1881	*1,121

At the close of 1881 there were in use at the various offices 1,467 Morse apparatus, 156 Relais apparatus, and 12 Hughes apparatus. These instruments at the end of 1881 were attended by 1,618 operators—1,147 males and 471 females. The average time of each operator was nine hours daily.

The number of telegrams sent during the same year was 3,046,910, containing an average of 14 words to each dispatch. Of these 3,000,000 telegrams, only 421, or $\frac{1}{7}$ per cent. of the whole number, were subject to well-grounded complaint.

The financial results are equally as brilliant, and show that after all cost of construction, after all salaries are paid, from the errand boy to the chief director, there remains to the treasury a net revenue of over $100,000.

The following table shows the net earnings over all costs and expenditures for the last five years:

	Francs.
1881	532,372.32
1880	502,555.91
1879	444,920.62
1878	200,044.43
1877	6,713.00

These results are most striking, considering, as it is claimed that nothing has been spared in the construction and in the material used, always choosing the best. It is true there seems to be no lavish expenditure of money on the offices and construction; everything appears simple and plain, but durable, and the public is guaranteed a prompt and sure corresponding system at a minimum price of 2½ centimes per word.

*Including 18 telephone stations.

CONSTRUCTION OF LINES.

The Swiss Republic is divided into six telegraph districts, under the immediate supervision of six inspectors, each having a secretary. The duties of these several inspectors is to see personally that everything is properly conducted within their respective districts; see that the lines are correctly surveyed, replace old poles, wires, and apparatus with new ones, change and replace workmen, visit the various offices and examine the books and accounts, and report the same at least once a year to the chief director at Berne. If a new line is proposed, it is his duty to make surveys and report as to the most available route, the cost of construction and the kind of material desired, which is provided on requisition from the immense stores always on hand at Berne. One pole is calculated to every 50 meters in construction, and 20 poles to one kilometer,* the same distance requiring 60 kilograms 3^{mm} of conducting wire.

Contracts for constructions are usually made at 2 francs per pole; for support on wooden houses, 45 francs; for support on stone houses, 1 franc. The workmen's wages are estimated at 40 francs† per kilometer.‡ In calculating the cost of a line one kilometer long, with the wire, using impregnated poles of 6.5^{m} length, the result is as follows:

		Francs.
20	poles, at 5 francs	100.00
20	cross-posts, at 20 centimes	4.00
20	iron collars, at 13 centimes	2.60
3	side posts, at 35 centimes	1.05
23	insulators, at 35 centimes	8.05
¼	kilometer 1½^{mm} wire	.40
60	kilometers 3^{mm} wire, at 47 centimes	28.20
	Wages	21.35
	Freight	65.00
	Miscellaneous expenses	10.00
	Total cost	240.65
	or per pole about	10.44

By using impregnated poles 8 meters in length, instead of 6.5^{m}, the price is increased to 290 francs per kilometer.

COST OF CONSTRUCTING ONE KILOMETER LENGTH WITH TWO WIRES.

		Francs.
20	poles, 8^{m}, at 7.50 francs	150.00
20	cross-posts, at 20 centimes	4.00
20	iron collars, at 13 centimes	2.60
6	side posts, at 35 centimes	2.10
46	insulators, at 35 centimes	16.10
1	kilometer 1½^{mm} wire, at 80 centimes	.80
120	kilometers 3^{mm} wire, at 47 centimes	56.40
	Wages on 20 poles, at 2.45 centimes	49.00
3	side supports, at 45 centimes	1.35
	Freight	68.00
	Miscellaneous expenses	20.00
	Total cost	370.35

The cost of 10 meter poles in length for one kilometer would be 420.35 francs, including two wires, the additional cost only being on the poles.

The estimated length of all the wires in Switzerland is, in round numbers, 16,174 kilometers. Of this number 9,283 kilometers are constructed along railroads, and 6,840 kilometers are on the roads and public highways. It is claimed that those on the public highways are in a much better condition than those on the railroads, as they received

* The wages are rated at 2.45 francs per pole.

† 1 franc equal to 19.3 cents.

‡ 1 kilometer equal to about two-thirds of an English mile.

the direct attention of the government inspectors, while it appears that, under a grant for the privilege of constructing wires for their own private use, the railroad companies are bound to keep in repair and superintend the government telegraph wires along their roads, and it is claimed that the government property is neglected to a certain degree. This conflict in authority becomes more apparent each year, and there is a strong feeling springing up among the authorities that it would be greatly to the advantage of the state were the railroads the property of the government, as is the case to a great extent in Germany, Austria, and Russia. The "grave-digger," however, to this great project seems to be the want of money.

By a comparison with the various countries it will be observed that this little republic is well to the fore-front as regards enterprise in their telegraph business and accommodations.

Table giving the number of official offices working at the end of 1881, *and the number of dispatches sent for the same period of time.*

Countries.	Offices, 1881.	Telegrams sent, 1881.
Austria-Hungary	3,669	5,146,164
Germany	10,308	11,585,617
Great Britain	5,600	27,080,532
France	5,885	17,514,147
Italy	2,470	5,015,005
Spain	385	1,478,359
Scandinavia	572	1,250,002
Belgium	827	2,093,900
Holland	416	1,972,158
Greece	100	385,008
Servia	60	148,332
Roumania	206	648,234
Denmark	141	513,830
Luxembourg	64	26,023
Egypt	170	246,797
Saxony	251	2,099,335
Switzerland	1,139	1,837,385

Under article 2 of the law authorizing the opening of offices at given points the requirements are as follows:

The petitioners, town, city, or village, asking for the opening of such office must subscribe and guarantee to the state a bonus of 400 francs and a yearly rental subscription of 100 francs. The state, however, agrees that if the number of dispatches sent from the office amount to 2,000 yearly within ten years, then the rent subscription of 100 francs yearly will no longer be required; but if the annual number of telegrams amounts to 1,000, then the rent exaction will be but 50 francs yearly.

The service is divided into three divisions, called chief officers, special officers, and intermediates. The chief officer is supposed to be on duty the year round, with general supervising functions. The special officers are on duty from 7 o'clock in the morning till 9 o'clock in the evening. The intermediate service goes on from 7 to 12 o'clock in the forenoon, and from 2 to 6 in the afternoon, and 8 to 8½ in the evening.

The chief and special officers are paid as follows per year:

	Francs.
Up to 3 years' service	1,500
After 3 years' service	1,750
After 6 years' service	2,040
After 9 years' service	2,290
After 12 years' service	2,760
After 15 years' service	3,200

The chief officers receive a certain bonus for their personal service as operators and their appointment of under operators, which brings their yearly salary up to about 4,000 francs.

The ordinary operator receives a salary of 200 francs, a year, and 24 centimes additional for each dispatch sent by him, and an additional 24 francs a year when he performs the duties of office boy.

THE TELEPHONE.

The telephone in Switzerland has as yet not reached very large dimensions. The government was rather loath to take it up, considering its utility to be uncertain and investments risky.

An enterprising company at Zürich, however, was willing to invest in its construction, and obtained a free permit from the state for five years. The enterprise proved to be such a success that many other companies applied for similar concessions, but in every instance have been refused by the state. With the one exception named, all the telephone lines in Switzerland are owned by the state. The cities of Berne, Lausanne, Geneva, Basle, Zürich, and St. Galle are well supplied in this service, and the government is busily engaged in the construction of the telephone in all the large towns and villages throughout the country. It is now estimated that the government owns 50 telephone stations, and that it receives 50 per cent. net profit on the investment. The box-rent per year to houses is 150 francs.

EMORY P. BEAUCHAMP,
Consul.

UNITED STATES CONSULATE,
St. Galle, January 25, 1883.

THE UNION STEAMSHIP COMPANY OF NEW ZEALAND.

REPORT BY CONSUL GRIFFIN OF AUCKLAND.

The recent tender of the Union Steamship Company to engage in a direct steam service with this colony and England, and the probability of its placing, at no distant day, a fortnightly line of fleet steamers between Auckland and San Francisco, have led me to furnish the Department of State with the following information in regard to the most successful steamship organization in the southern hemisphere.

About six years ago the Union Steamship Company did not own more than three or four small boats, and these were principally employed in the coastal service of the South Island. It now owns a fleet of 28 fine steamers of an aggregate tonnage of 25,607 gross register.

The directors of the company have always had the greatest faith in the magnitude of the resources and capabilities of the colony, and they have not been slow in anticipating the requirements of a large and steadily increasing commerce. Whenever an opportunity arose for extending their service, or for co-operating with other steamship lines, they were found prepared to take advantage of the opportunity. The headquarters of the company are established at Dunedin, one of the wealthiest and most prosperous cities in the colony. This was done principally for the purpose of profiting by the large trade of the various ports in close proximity to that city. This trade was at once absorbed

by the company. It was found that no other line could at all compete with it. Besides this trade, the company's steamers now make bi-weekly trips around the east and west coasts of the colony, weekly trips to Melbourne, fortnightly trips to Sydney, New South Wales, by way of Auckland and the east coast, monthly trips to Sydney, via Welling and Cook's Straits, and fortnightly trips to the Fiji Islands. It also performs the coastal service for the San Francisco Pacific Mail steamers. The subjoined table contains a list of the steamers of the Union Steamship Company, with the name of each vessel, dimensions, tonnage, horse-power, speed, passenger accommodation, &c.:

Fleet of steamers of the Union Steamship Company of New Zealand.

Name.	Length.	Tonnage.	Horse-power.		Passengers.		Speed.
			Nominal.	Effective.	Saloon.	Steerage.	
							Knots.
Manapouri	275.0	2,000	.....	2,000	150	100	14
Wairarapa	275.0	2,000	.....	2,000	150	100	13
Houroto	285.0	2,000	.....	1,500	100	150	13
Tarawera	300.0	2,500	.....	2,350	150	100	15
Waihora	300.0	2,500	.....	2,350	150	100	15
Wakatipu	290.1	1,797	256	1,250	108	71	12
Rotomahana	285.0	1,727	400	2,000	141	72	15½
Te Anau	270.0	1,652	207	1,450	120	87	14
Arawata	245.4	1,098	300	1,250	132	106	12½
Ringarooma	245.1	1,096	300	1,250	132	106	12½
Rotorua	226.0	926	172	900	86	60	12
Albion	218.3	806	180	800	86	121	10
Hawea	215.7	721	160	850	96	72	13
Penguin	220.5	680	180	900	76	30	13
Wanaka	174.8	493	120	600	70	33	10
Taiaroa	189.3	438	110	500	40	32	10½
Waitaki	164.8	412	90	450	53	38	10
Beautiful Star	119.2	177	30	150	22	16	8
Maori	144.0	174	65	300	28	20	9
Hero	224.3	985	150	600	53	62	10
Southern Cross	135.2	263	50	250	30	10	9
Mahinapua	.....	450	.....	500	30	30	.....
Omapere	.....	600	.....	500	.....	.....	.....
Takapuna	.....	1,000	.....	.....	.....	.....	15
*Suva	.....	400	.....	.....	.....	.....	.....
*Waihi	.....	.....	.....	.....	.....	.....	.....
*Boojurn	.....	.....	.....	.....	.....	.....	.....
*Snark	.....	.....	.....	.....	.....	.....	.....

*Steam launches.

The Takapuna is of very light draught, and one of the fastest steamers on the Pacific Ocean. She is elegantly fitted up, and carries 100 saloon passengers. She is sometimes employed in carrying the mail between Auckland and Wellington, performing the journey by way of Manukau harbor, without stopping at Taranaki or any other intermediate port on the west coast.

The Rotomahana and the Te Anau are great favorites with the public. The former is magnificently fitted up, and steams easily from 15½ to 16½ knots per hour. Five of the steamers, the Manapouri, Wairarapa, Houroto, Waitara, and Tarawera, were intended to be of the same size and fitted up as nearly alike as possible. The first-named steamer, the Manapouri, is the only one of the vessels that I have had an opportunity to inspect carefully. Her length between perpendiculars is 283 feet; extreme breadth, 36 feet; molded depth, 25 feet; the height from the top of the main-deck beams to the spar-deck beams being 8 feet. She carries six teak-built boats, each of which is fitted with patent disengaging apparatus. She was launched on December 20, 1881, from the

Leven Shipbuilding Yards, Dumbarton. She is constructed of steel, in accordance with Lloyd's rules for the 100-A three-decked class, and has a full poop, hurricane-house, and topgallant forecastle. She has straight stem and an elliptic stern, the bottom of the vessel being constructed on the cellular and bracket-floor principle, continuous from peak to bulkhead, except in the boiler-room, through which space ordinary plate-floors are fitted. To add to her strength and security in case of collision, there are seven bulkheads, five of which are watertight and extended as high as the main deck. The decks, spar, poop, hurricane, and forecastle are of kauri, specially sent to Dumbarton from Auckland. She is schooner-rigged, the lower masts being of steel, fitted with sliding jack-stays. The engines are 350 horse-power, nominal, indicating 1,200 horse-power, and they can propel the vessel through the water at a rate of 14 knots on a daily consumption of 35 tons. In the engine-room there are one of Siemens' dynamo-electric machines and Siemens' alternating current machines, driven by a Brotherhood engine, which is driven at the rate of 750 revolutions a minute, and 170 electric lights, besides lights for discharging cargo; the latter, however, were not ready when the ship left England, and are to be sent out. These lights, which are known as Swan's incandescents, are plentifully distributed throughout the vessel, and can all be lighted or turned out in an instant, or a single light can be so treated at will. The saloon is amidships, forward of the engine, and occupies the whole width of the vessel, the sleeping berths branching off fore and aft. The roof is tastefully gilded and painted, and the framing of the saloon consists of hardwood paneling, maple on mahogany, with rosewood molding, and half-circular fluted columns of the same material. The dining-tables are eight in number, while at each there are sofa-seats, upholstered with Utrecht pale-green velvet, and mahogany revolving chairs similarly covered. The walls are paneled in hard woods, principally maple; in the center of each panel are tastefully-painted designs; the moldings are of rosewood, finished with fluted columns of the same wood, richly gilded. These columns are surmounted by carved Corinthian capitals, while a massively-carved cornice completes the whole. The roof is finished in sunk panels of a very delicate cream-colored tint, with gold enrichments. The floors, both of the saloon, ladies' cabin, and sleeping berths, are handsomely carpeted, while the whole of this part of the vessel is brilliantly lighted by Swan's incandescent electric lights, which are placed in handsome silver lamps, the shades of which bear the company's distinctive flag in the center. The light color of the decorations give the interior a very airy appearance.

Entrance is gained to the saloon by means of large doors, glazed in ground glass, artistically decorated. The doors of a handsome sideboard at the entrance to the saloon are decorated with hand-painted panels, burnt in. These were executed by Miss Denny, daughter of the builder. This saloon will seat 110 passengers, the total number that can be berthed in this part of the vessel being 125.

The ladies' cabin is handsomely furnished in polished hardwood panels, carved trusses, and cornice. The state-rooms number 40, and each berth is supported on mahogany turned pillars, and fitted with spring bottoms. The social hall, 26 feet long by 15 feet wide, is above the saloon proper, and has a wall in the center 16 feet long by 6 feet wide, the inside being finished in polished woods of various kinds. The floor is laid in parquet work, while the sides are formed of polished woods. The inlaid work is exceedingly handsome, representing birds and fish, executed in pale green, on a maple groundwork. Sofa seats are placed

all round the room, which is supplied with tables, a mirror, and a splendid clock, together with a piano and an assortment of music. Between this and the saloon stairway is the ladies' deck cabin, a very pretty and elegant apartment, while the smoking room, under the forecastle deck, is lined inside with polished oak, neatly paneled.

The Wairarapa, a sister ship of the Manapouri, has, I think, made the fastest time of any of the vessels belonging to the Union Steamship Company. Her last voyage from Gisborne to Auckland was the quickest on record. The Rotomahana, however, made the fastest time out from England, and although only built for 15½ knots, she has proved her capacity of steaming in ordinary weather 17 knots per hour; but it is claimed that the steaming powers of the Wairarapa have not yet been fairly tested. The Wairarapa was built on the same lines as the Manapouri, and is precisely like her in every way, both in size, fittings, and decorations, with one exception, that on the fore part of the dining saloon, where the Manapouri has a sideboard, this vessel has a recess or an alcove, beautifully upholstered, a seat all round, and curtains in front. She has a straight stem, and her engines, which are by the builders of the ship, are on the compound principle, with all the latest improvements, and the cylinders are 70 inches and 40 inches, and are of 2,000 indicated horse-power. The boilers are of steel, and are kept going by 12 furnaces. The passenger accommodation, including dining saloon, social hall, and sleeping berths, is of the very best description. The saloon occupies the full width of the ship, and is forward of the engines; the ceiling is of white enamel, and the sides and bulkheads are of sycamore and American walnut, while the paneling is relieved by figurative lacquered ware. The social hall is similarly decorated. The smoking-room is fitted with white marble paneling, thereby avoiding the disagreeable smell of smoke which clings to the upholstery and woodwork.

The company has also several large steamers building for the purpose of extending their service to China and Japan during the tea season. The importation of tea to this colony has become a very important industry. During the year 1881 there were imported to this colony 4,493,924 pounds of tea, of the value of $1,276,980, against 3,697,906 pounds of tea, of the value of $1,053,825, for the year 1880. The truth is, the colony of New Zealand has made such rapid progress within the last few years that it has become absolutely necessary to increase its steam service. The New Zealand Shipping Company have agreed to put on a line of steamers to run between this colony and England. This has been brought about without the aid of any subsidy, and is due solely to New Zealand enterprise. The first steamer, the British King, leaves London for Wellington and Lyttleton 1st of January, 1883, and will be followed by the British Queen for Lyttleton in February. The following month a steamer will leave direct for Auckland. The British King is a steamer of 3,558 tons, or slightly larger than the vessels now employed upon the San Francisco mail service.

The route chosen is via the Straits of Magellan, longer in mileage than via the Cape of Good Hope, but possessing the advantage of steady, favorable winds. The voyage is expected to occupy about 45 days, being shorter than the journey westward, with the delays of transshipping at Sydney. By means of this line the New Zealander, traveling to London, will obtain the advantages of a maximum of speed with lowness and certainty of cost.

The direct service, however, will not be able to make anything like as quick time to London as the voyage by the Pacific mail steamers to

San Francisco and from thence across the continent. This route will always be preferred for rapid transit, even at the present low rate of speed across the Pacific. The London mails have been delivered in Auckland inside of 36 days, and when fast boats are employed the American route will be the swiftest to England, even for the colony of Victoria.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, N. Z., December 29, 1882.

SILK EXPORTS FROM SWITZERLAND.

REPORT BY CONSUL MASON.

The declared exports of ribbons from the consular district of Basle to the United States during 1882 amounted to 10,995,475 francs, an increase of 1,190,447 francs over the shipments of the preceding year. During the same period there were exported from the same district silk tissues, including mainly lining goods and umbrella serges, valued at 586,295 francs, making a total of 11,581,770 francs' worth of silk goods during the year. This increase over the shipments of 1881 was confined wholly to the first ten months of 1882. November and December failed to fulfill the promise of the earlier part of the season, and the closing year brought serious disappointment to the ribbon manufacturers.

For reasons which are variously explained the ribbon trade in New York experienced a serious check during the month of October.

The fall season opened most auspiciously, and for three or four weeks sales were heavy and prices well maintained.

The result was that duplicate orders were freely given and heavy consignments made to American agents.

Then in the height of the season came a relapse, trade slackened, and large stocks were closed out at auction in November or were packed away to abide the chances of another season.

The American market is therefore left with an incubus of unsold goods, and the situation is still further complicated by the impending changes in the tariff, which may again reduce the value of these superfluous accumulations.

In Europe the new-year outlook for the ribbon weaver is hardly more assuring. England offers for the moment only a sluggish and limited demand for velvet, cashmere, and plaid qualities.

In Germany the market is more active, and the manufacturers who work for the German trade will have their looms fairly occupied during the winter.

In France the ribbon traffic is prostrate, and the most experienced manufacturers in Basle fail to recall any year in which the January prospect has been so perplexing and uncertain.

That there will be during the current year a fair average demand for ribbons in both Europe and America is very generally believed.

But what styles, what colors, what widths will be required are the all-important questions which thus far puzzle the most discerning dealers and manufacturers.

Paris is appealed to, but gives no sign.

The styles and qualities which may be most desirable for the spring season are thus far vague and undefined.

The only ribbons which have been really in demand during the past four months have been ottomans of various qualities, velvet, and short plushes with reverse face of satin, cashmere patterns, and a few plaids, which last have been sold mostly to England and the United States. The appearance of cashmeres and plaids this season indicates a gradual return to the styles of two or three years ago, but the tendency is thus far not strong enough to inspire much confidence in manufacturers.

The first week of January shows a brisk export from Basle of rather ordinary qualities, faconnés, ottomans, and failles, to the United States. These are mostly purchased goods manufactured upon orders which were placed in October and November. While the shipments of January may equal those of last year, there will assuredly be a heavy decline in February and March, unless an early adjustment of the silk tariff and a radical improvement in the trade at New York should come to the rescue of the present weak and uncertain market.

It is generally believed here that by reason of speculative complications and other causes, the abundant harvests of last summer and autumn have not yet exerted their full influence upon the general prosperity of the American people, and it is believed that when this effect is finally developed there will be a notable improvement in the demand for all luxuries.

Whether this expectation is well founded or not need not be discussed here, but all present indications would seem to signify that the ribbon exports from Switzerland to the United States during 1883 will be less in quantity than those of 1882.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, February 10, 1882.

THE BLACK YEAR—1882.

REPORT BY CONSUL MASON, OF BASLE.

The general situation in Central Europe at the close of the past year has been one of gloom and discouragement. In their new year reflections upon the record of 1882, the French, Swiss, and German newspapers have uniformly expressed the hope that it may be long before another year so disappointing shall be recorded.

Agriculturally, the season was in many respects a failure, and the condition of nearly all the working classes is worse than it was a twelvemonth ago.

Until the middle of June the season was exceptionally promising for the farmers and vine-growers; then came on a period of rains, which continued almost without interruption until the close of the year. So much rain and fog and gloomy, chilling weather during the last six months of the calendar are beyond the memory of the present generation.

The wheat, which promised an excellent yield, was broken down by storms and injured by the heavy rains during harvest time.

The grapes, upon which so large a part of the agricultural income of the Upper Rhine country depends, were either nipped by late spring frosts, or, if they escaped that peril, hung hard and green on the vines

through the sunless months, and, if gathered at all, were so sour and unripe as to be practically worthless.

The pastures were green and fresh, so that the dairymen and stock-raisers had altogether the best of it, but in a country of such limited area and dense population as Switzerland, grazing can at best redeem only partially the other agricultural failures of a year like 1882.

To complete the record the heavy and protracted rains throughout Central Europe caused a series of disastrous floods, which laid many of the richest valleys of France, Germany, and Switzerland under water, destroying the gardens and sweeping away the savings of thousands, to whom life is at best a struggle, and to whom any casual loss entails actual distress.

It is but natural that a year of such discouragements should stimulate powerfully the desire for removal to countries which offer fairer prospects, and the information furnished by leading emigration agencies is to the effect that the emigration from Switzerland to the United States during 1883 promises to exceed in volume that of any previous year.

In many villages the number of those who go will be limited only by their ability to collect the means of securing transportation from this country to new homes in the United States.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, February 10, 1882.

CURE OF SWINE DISEASE AND HYDROPHOBIA IN FRANCE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

Mr. Pasteur, the indefatigable French savant, has not allowed the year 1882 to pass without adding one more important discovery for the benefit not only of his own country but the world at large.

Already, in my dispatch No. 240, of July 5, 1882, I have spoken of this illustrious Frenchman in connection with the pebrine and flacherie diseases, which at one time threatened to destroy French sericulture, but which, with other diseases of the silkworm, were overcome and conquered by the scientific researches and intelligent work of Mr. Pasteur.

The rescuer of the silk culture lends to-day a helping hand to the hog-farmers of France.

Le rouget or red disease (*mal rouge*), is an epidemic which causes fearful havoc to the porcine tribe every year. It is estimated that over 20,000 of these animals succumbed to this disease in the valley of the Rhone during 1882.

Mr. Pasteur with Mr. Thullier visited the districts where the disease had proved most virulent, and after careful examination discovered the destroying insect (*le microbe assassin*), that is to say, the microscopic insect which is the origin of the plague. Subsequent experiments showed him that it was as possible to vaccinate hogs for the rouget as he had already successfully vaccinated cattle against the charbon or horse-fly, and to thus preserve them from the plague.

I have thought, as this disease may have already or may sooner or later develop itself in the United States, that it would be of service to

both our scientists and hog-raisers to present the salient points of Mr. Pasteur's discovery.

1st. The *mal rouge des porcs* (red disease of swine) is caused by a peculiar *microbe*, or microscopic insect, which lives outside or apart from the body of the animal. It is so slender, so thin, that it might easily escape the most minute observation. It resembles the microbe of the *choléra des poules* (chicken cholera) nearer than any other. Its shape is also that of the figure 8, but more delicate and less visible than that of the microbe of the cholera, and it differs essentially from the latter in its physiological properties; it has, for instance, no action or effect upon hens, while it kills rabbits and sheep.

2d. Inoculated in its purity to swine, and even in the smallest appreciable doses, it rapidly develops the disease, and causes death with all the usual spontaneous symptoms. It is especially fatal to the white or improved breed so greatly esteemed by hog-raisers.

3d. Dr. Klein published in London, in 1878, a large volume upon the *rouget*, which he called the *pneumo-entérite* of swine; but it is clear now that he entirely misapprehended and misunderstood the nature and properties of this parasite. He described the *microbe* of the red disease (*mal rouge*) as a *bacille à spores* more extensive than the *bacteride*.* Very different from the true microbe of the *rouget*, the bacille of Dr. Klein has no relation whatever with the etiology of this disease.

4th. Mr. Pasteur is positive that swine once successfully inoculated are secure against the disease.

5th. It is possible that further experiments may be necessary to conclusively demonstrate the success of those already had, but Mr. Pasteur is confident that the hog-raisers of France will adopt for the coming spring season his treatment, and that vaccination by the *microbe virulent* will prove the safety and protection of the porcine race. These facts constitute a new conquest, the importance of which will be generally recognized.

Medical science increases its claim to consideration each hour. By this new discovery one of the resources of farmers, especially in the department of the Midi, may be rescued from serious loss and restored to its just importance.

Mr. Pasteur constantly leads at the head of all these labors. The same success accompanies all his efforts. His example is all but unique in the history of science. Rarely, if ever, has it been given to one man to make as many valuable discoveries during his life-time, and in a period so brief. Hardly returned from his labors in the south of France, he has communicated to the Academy of Sciences precious information which must contribute to elucidate the problem which has so long defied solution, concerning hydrophobia.

Of all distempers hydrophobia has proved one of the most difficult of cure. Clinical observations have been powerless, and there has appeared no criterion by which to control, even in the slightest way, investigation. Until now it was believed that the virus of hydrophobia was to be found in the saliva only, and yet saliva, though a vehicle of the poison, does not always produce the rage.

The inoculation of the saliva caused by the bite or by the direct injection in the cellular tissues does not invariably communicate hydrophobia; besides, if the disease declares itself, it is not positively known how long it takes for incubation. It follows that if judgment is to be

* For an explanation of these see Special Report No. 22, Department of Agriculture, Washington, 1880, pages 61, 85, 131, &c.

formed from the experiences of inoculation, when these are negative there is always doubt as to the success of experiments, and especially is this so when it is considered how great is the repugnance and danger of arresting and operating upon mad dogs. In fact the obstacles in the way have heretofore appeared insurmountable. Mr. Pasteur has overcome all these difficulties and discovered a rapid and certain method for making practical tests. His method may be summed up in two propositions:

1st. The center of the nervous system is the seat of the hydrophobic poison. It is probably there that it is engendered in its purity.

2d. Inoculation by trepanning on the surface of the cerebral organs produces rapidly and unmistakably hydrophobia.

By employing this treatment Mr. Pasteur and his associates believe to have established the means by which the disease may be overcome.

Starting from the foregoing propositions, the following facts are considered to be fairly established:

Hydrophobia, whatever form it may take, immediate or latent, proceeds in every instance from the same virus.

The symptoms may be essentially different, depending upon the point of the nervous system affected, encephalic or spinal, that is to say, wherever the poison may localize or develop.

There has been discovered in the hydrophobic poison different forms of the microbe, *i. e.*, an association of forms or types.

Death may follow from either of those discovered by Mr. Pasteur, by the poison itself, or by the microbe which he describes as the *microbe de la salive.*

It is recognized that the saliva of man or child can be virulent; it can cause disease and even death by inoculation. Exaggerated development of pus produces death almost invariably.

The spinal bulb of a man having died of hydrophobia, as that of any other animal, is always virulent; the virus is found also in the whole or a part of the brain, in the spinal marrow as well as in all parts of the marrow.

The poison is everywhere the same as long as the substances of the brain or of the spine are not invaded by putrefaction.

Mr. Pasteur has preserved during three weeks a hydrophobic brain, with all its poisons, at a temperature of about 12 degrees centigrade.

A sure and rapid method of developing the disease is to inoculate the poisonous matter by trepanning on the surface of the brain the "*arachnoidienne* cavity"; that is to say, to perforate the fine, thin, transparent membrane lying between the *dura* and *pia mater.*

The same results may be obtained by inoculating the blood with the poison in its pure state. Hydrophobia will declare itself within six, eight, or ten days, and always prove fatal.

Hydrophobia communicated through the blood presents very often a different character to that induced by the poisonous bite or by trepanning.

According to Pasteur many cases of latent hydrophobia have escaped observation.

In cases of madness which he calls *rages médullaires*, rabid paralyses are numerous, fury often absent, howling of the rabid dog rare. On the other hand, irritation or itching is sometimes fearful.

Pasteur is strongly of the opinion that by injections through the blood the spinal column is the first affected; it is here the poison centers and multiplies and is diffused through the system. If death does not follow from the injections of infectious saliva on the poisoned blood in-

troduced into the veins of the dog, this does preserve the animal from hydrophobia and subsequent death, should it again be inoculated by poisonous matter introduced by trepanning or injections through the veins.

These results contradict those reported to the Academy of Sciences by Mr. Galtier in August, 1881.

Pasteur and his efficient coadjutors report cases of spontaneous cure of hydrophobia after the first symptoms of the disease have been manifested, but never after it had assumed an acute stage. They have also observed cases when, after the disappearance of the first symptoms, revival of the madness, after an interval as long as two months, has occurred, and with the acute disease death has rapidly followed.

Mr. Pasteur cites an interesting fact: Of three dogs inoculated in 1881, two of which were immediately seized and died of the rage, the third after manifesting the first symptoms had been cured. This dog, again inoculated in 1882 on two different occasions by trepanning, has completely resisted madness. It follows, then, that even though the disease may be mild in the first attack its recurrence is not absolute. This fact is considered as a highly important step towards the discovery of a cure for the disease.

In the laboratory of *L' École normale* there are to-day four dogs which are considered to be impervious to hydrophobia, no matter what mode of inoculation may be employed, nor how intense the rabic poison. Among these dogs is the one already alluded to as having been cured.

The other three have also been preserved because of the mild form of their attack, or are they naturally refractory to the disease, and, if so, may not parallel instances be found? This point remains for solution, and has now Mr. Pasteur's study. As hydrophobia cannot be contracted except by the bite of an enraged animal, the capital question is to discover the proper remedy to preserve humanity from this terrible scourge.

If this discovery is yet distant, it may be well hoped that in the presence of the remarkable efforts of Pasteur and the light modern science is daily unfolding he may speedily arrive at success.

The study and experiments to this end may seem audacious, as they are certainly attended with grave danger. It is now two years since Mr. Pasteur experimented on the first two dogs stricken with the disease; since then he has constantly kept and experimented upon mad dogs. On several occasions he has utilized dogs dead from the rage, at the school of Alfort. Recently he obtained the head of a cow which had died from the bite of a mad dog. It is interesting to know that all animals inoculated by the virus of this cow died from hydrophobia.

Pasteur has already operated on over 200 animals, dogs, rabbits, and sheep, and obtained like results through inoculation by trepanning. It is possible that no definite conclusions have as yet been reached from these remarkable researches, but the way has been opened, is being resolutely pursued, and before very long the problem will unquestionably be solved.

It is a recognized fact that already and within the brief period of two years Mr. Pasteur has accomplished what centuries of investigation had heretofore been unable to attain. There is every reason to believe that he will shortly triumph as completely in this laudable work, as he has in conquering the silk malady.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, January 9, 1883.

TRADE AND NAVIGATION OF RUSSIA.

REPORT BY CONSUL-GENERAL STANTON, OF ST. PETERSBURG.

I transmit herewith a brief statement of St. Petersburg's navigation, and timber and grain trade in 1882.

Throughout the country trade continues to be depressed, nor are there any indications of improvement in the future.

The ruble is constantly fluctuating in value, with generally a downward tendency. It now takes 1.62 paper rubles to purchase one gold ruble, being the greatest depreciation of value during the last two years.

The commercial world is characterized by a lack of confidence and enterprise. Failures are increasing in number and frequency, and everything seems to indicate the approach of a financial crisis.

NAVIGATION AT ST. PETERSBURG AND CRONSTADT.

The following table gives the arrivals and departures at the ports of St. Petersburg and Cronstadt in 1882: The number of vessels arriving was 1,124 sailers and 1,069 steamers. There were in port over winter, in 1881, 12 sailers. There were coasters abroad, 45 sailers and 5 steamers. Total vessels, 2,255. Compared with 1881 the tonnage was as follows:

Nationality.	1882.				1881.			
	Steamers.	Tons.	Sailers.	Tons.	Steamers.	Tons.	Sailers.	Tons.
English	663	553, 360	90	18, 976	577	458, 572	98	21, 559
German	173	86, 607	259	38, 558	202	96, 572	213	31, 273
Norwegian	39	15 907	253	91, 274	28	9, 515	205	62, 549
Russian	48	15, 022	178	46, 334	36	12, 096	144	39, 576
Danish	61	51, 931	161	23, 936	43	30, 959	92	12, 174
Swedish	62	17, 361	50	9, 856	106	26, 958	31	7, 313
Dutch	20	12, 498	70	14, 915	13	7, 394	66	11, 019
Belgian					6	4, 766		
French	2	1, 958	9	2, 121			27	4, 597
Italian			8	2, 311	1	1, 032	3	762
Austrian			5	2, 856			5	2, 333
American			1	814			2	1, 983
Total	1, 069	754, 644	1, 124	251, 951	1, 018	647, 864	886	195, 107

Grand total, 1882, 2,193 vessels and 1,006,595 tons; 1881, 1,904 vessels and 842,971 tons.

Of the foregoing 2,255 vessels, there were:

Wintering in port 15; Russian vessels cleared as coasters, 111; freight steamers cleared for Caspian Sea, 19; river steamers in port, 11—total, 156.

Cleared for foreign ports: 949 vessels cleared for ports in Great Britain; for Baltic Sea, 305; for Holland, 257; for Germany, 188; for Sweden, 158; for France, 132; for Denmark, 47; for Belgium, 38; for Norway, 11; for Siberia and South Russia, 10; for United States, 2; for Portugal, 1; for Australia, 1—total, 2,099.

There were also 648 coasters—358 thereof steamers—entered at the port of Cronstadt, and which are not included in the foregoing figures.

ST. PETERSBURG'S TRADE ON THE NEVA.

Navigation on the Neva, by which route the greatest part of the merchandise from the interior is sent, was open from March 23 (April 4) to October 30 (November 11), or 221 days. During this time the imports and exports into St. Petersburg from and to the interior via the Neva were, respectively, 3,617,676 and 56,549 tons of merchandise.

The following table shows the trade of 1882 as compared with that of preceding years, viz:

Year.	Number of days.	Imports.	Exports.
		Tons.	*Tons.*
1878	241	2, 858, 495	37, 781
1879	213	3, 220, 397	47, 190
1880	189	3, 089, 959	52, 722
1881	202	3, 107, 664	41, 603
1882	221	3, 617, 676	56, 549

During the same season the following deals, batteaus, and boards were shipped from St. Petersburg:

Year.	Standard dozen.			
	Redwood.	Whitewood.	Deal ends.	Total.
1877	296, 013	440, 834	38, 487	775, 334
1878	262, 665	416, 347	36, 239	715, 251
1879	194, 916	350, 006	29, 988	574, 910
1880	251, 061	386, 126	33, 992	671, 179
1881	327, 483	350, 585	33, 468	711, 536
1882	408, 658	500, 460	48, 763	957, 881

The foregoing 957,881 standard dozen were shipped as follows:

Great Britain: London, 251,475; Hull, 128,560; Grangemouth, 62,324; Leith, 59,410; Montrose, 33,847; other ports, 210,226. Total, 745,842.

Holland: Amsterdam, 56,223; Schiedam, 21,286; Rotterdam, 13,665; other ports, 24,356. Total, 115,530.

France: Honfleur, 31,780; other ports, 21,788. Total, 53,568.

Germany: Lubeck, 31,169; other ports, 7,263. Total, 38,432.

Sundry European ports, 2,592.

Melbourne, 1,917.

GRAIN EXPORT OF ST. PETERSBURG.

The grain export of St. Petersburg is given in the following table for 1882:

Year.	Wheat.	Rye.	Linseed.	Oats.	Buckwheat.	Rye flour.	Wheat flour.
	Tchetverts.	*Tchetverts.*	*Tchetverts.*	*Tchetverts.*	*Tchetverts.*	*Kools.*	*Bags.*
1875	660, 947	1, 876, 330	889, 705	2, 086, 412	169, 644	227, 522	3, 478
1876	1, 313, 406	2, 960, 465	774, 927	2, 006, 866	261, 493	326, 702	7, 198
1877	2, 575, 338	3, 436, 278	705, 433	2, 323, 002	373, 121	632, 058	109, 831
1878	1, 619, 400	1, 150, 080	473, 266	1, 666, 260	142, 870	176, 400	44, 409
1879	1, 802, 004	2, 017, 265	809, 466	2, 761, 588	341, 721	207, 193	13, 088
1880	199, 075	2, 091, 402	683, 744	3, 447, 460	244, 404	143, 060	16, 120
1881	246, 460	876, 745	620, 139	2, 754, 515	182, 508	86, 563	7, 720
1882	1, 397, 994	210, 597	687, 154	2, 927, 630	261, 425	66, 038	9, 172

EDGAR STANTON, *Consul-General.*

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, December 26, 1882.

MINING INDUSTRY OF RUSSIA.

REPORT BY CONSUL-GENERAL STANTON.

The following particulars of Russia's mining industry for 1880 have been furnished by the mining department:

Gold.—There were 2,641 poods and 29 pounds mined in 1880, being 290 poods and 22 pounds more than the average of the preceding five years (1875–1879), and 10 poods more than in 1879. Of this amount 184 poods were produced in the mines of the Emperor, and the remainder by private enterprise, chiefly in Siberia. In 59 districts there were 1,306 gold-washing establishments, which washed out 1,300,096,275 poods of gold-bearing sand.

Platina.—The year's production hereof was 179 poods and 36 pounds, or 67 poods and 33 pounds more than the average of the preceding five years, and 41 poods and 26 pounds more than in 1879. This metal is found only in the government of Perm.

Silver.—Of this metal 616 poods and 28 pounds were produced, or 56 poods less than the average of the last five years, and 81 poods less than in 1879. The largest quantity—506 poods and 27 pounds—was produced in the government of Tomsk. Twenty-six mines were worked; 529 were idle. The chief amount was produced by 23 imperial mines.

Lead.—The production hereof was 69,947 poods, being 7,848 poods less than the average of the preceding five years and 12,895 poods less than in 1879. The lead production is dependent on that of silver.

Copper.—The total production was 195,518 poods, or 2,023 poods less than the average of the last five years, and 4,830 poods less than in 1879.

Zinc.—The total production was 267,800 poods, or 3,237 poods less than the average of the last five years, and 4,212 poods more than in 1879.

Tin was not produced, but 1,250 poods tin-ore were mined in the government of Viborg.

Iron ore.—The total production was 27,375,370 poods, or 1,514,003 poods more than the average of the preceding five years, and 962,564 poods more than in 1879. Of this 25,636,257 poods were smelted with charcoal, and 1,759,113 poods with coal. Government mines produced 2,245,430 poods in Russia, and 289,925 poods in Poland. Nine hundred and fifty-six mines were worked, their output being 62,493,424 poods of ore; 1,124 mines were idle; 207 blast furnaces smelted the ore.

Iron.—The total production was 17,940,531 poods, or 650,295 poods more than the average of the preceding five years, and 839,689 poods more than in 1879. The government furnaces in Russia produced 505,449 poods; in Poland, 106,167 poods; the Emperor's works, 49,825 poods; and private works, 10,336,318 poods; in the Mal district, 1,891,480 poods; in Central Russia, 188,803; in Siberia, in works not under the mining department, 1,866,253 poods; in South Russia, 744,847 poods; in Poland, 1,202,522; in Finland, 940,857 poods. Of the 252 iron works, 52 were idle. The production consisted of 13,271,408 poods bars and iron rails, and 4,559,123 poods sheet-iron, both metal and plates, and was the work of 464 puddling furnaces, 602 welding furnaces, and 669 forges.

Steel.—The total production was 18,761,298 poods, or 14,079,946 poods more than the average of the preceding five years, and 5,832,128 poods more than in 1879. Of this quantity, 417,718 poods were cement and puddled steel, and 18,343,580 poods were Bessemer and Martini steel, of

which 237,218 poods were worked into cast steel and 12,294,548 poods into steel rails. Of this amount the state works produced in Russia 309,928 poods, the Emperor's works 501 poods; private works in Mal district 1,915,233 poods, in Central Russia 348,833 poods, in South Russia 875,081 poods, in Siberia 1,604 poods; in works not subordinate to mining department 10,931,703 poods, in Poland 4,355,562 poods, and in Finland 32,827 poods.

Cast iron.—The total production hereof was 3,208,556 poods, or 39,651 more than the average of the last five years, and 47,137 poods more than 1879.

Coal.—The total production hereof was 200,942,523 poods, or 69,333,988 poods more than the average of the last five years, and 22,704,510 poods more than in 1879. Hereof 29,541,217 poods were anthracite coal, 168,925,405 were common coal, and 1,587,381 poods lignite.

Naphtha.—The total production was 21,497,995 poods, or 7,813,433 poods more than the average of the last five years, and 22,026 poods more than in 1879. Of this production the government of Baku yielded 20,882,579 poods; the Transcaspian district, 287,000 poods; the Tereck district, 164,610 poods; Tiflis, 76,682 poods; Kooban district, 90,000 poods; Dagestan, 1,204 poods; and in the government of Yelesavetopal, 950 poods. The production of kerosene was 7,946,253 poods; lubricating oil and benzine, 1,010,224 poods; tar, 256,077 poods; and mastic, 313,534 poods.

Graphite was not mined in 1880.

Cobalt.—The total production was 677 poods.

Nickel was not produced.

Chromic iron.—The total production was 503,503 poods, or 138,504 poods more than the average of the last five years, and 139,388 poods less than 1879. The largest part of this production, 310,393 poods, is found in the government of Perm.

Manganese.—This metal is mentioned in 1880 for the first time in the records of the mining department. The total production was 614,549 poods, and was mined chiefly in the governments of Kootais, Perm, and Orenburg.

Sulphur.—The total production was 5,500 poods; 15,696 poods less than in 1879. It was produced in the governments of Daghestan and Kasan.

Iron pyrites.—The governments of Daghestan and Kyeltzr produced each 100,000 poods of iron pyrites and Kasan 45,000 poods.

Salt.—The total production was 47,571,916 poods, or 5,900,164 poods more than the average of the last five years, and 2,359,973 poods less than 1879. Of this production 2,875,356 poods were rock salt, 15,232,580 poods were salt, 29,463,980 poods were sea salt. Besides this amount of cooking salt, 68,658 poods of Glauber salt were also produced.

Money coined.—Gold, 31,144,032 rubles; 3,156,024 rubles less than in 1879.

Silver.—(Full weight,) 700,010 rubles; 139,996 rubles more than in 1879. Small coins, 5,653,003 rubles; 347,251 rubles less than in 1879. Copper, 1,240,300 rubles; 59,799 rubles more than in 1879.

Miners.—The mining industries of Russia employed in 1880 283,414 laborers, or 6,207 more than the average of the preceding five years, and 8,632 less than 1879.

Machinery.—The steam-engines, turbines, &c., employed had a *nominal* 76,090 horse-power; 5,999 more than in 1879.

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, December 26, 1882.

SHIPPING AND SHIPPING INSTITUTIONS OF DUNDEE.

REPORT BY CONSUL WELLS.

Shipping at this port continues to improve. During 1881 15 vessels were added to the register of the port; 6 of these were steamers of large dimensions. At the end of 1880 there were 196 vessels on said register, with a tonnage of 9,854 tons. The total tonnage of the 15 new vessels added in 1881 was 11,192 tons, but from this falls to be deducted 9,548 tons, the register tonnage of 18 ships struck off during that year. Thus the aggregate tonnage of Dundee at the end of 1881 was 100,192 tons. While, therefore, the tonnage increased between one and two thousand tons, the number of ships hailing from the port decreased by three. The addition to the tonnage of this port this year is expected to be large and to show an increase over last year. In the Baltic and coasting trades steamers are now greatly used, and it appears to be only a question of time when wooden ships will, by the force of circumstances, have to give way to steamers. The following table shows the number:

Number and tonnage of vessels employed in the foreign and coasting trades of Dundee, Scotland, both inwards and outwards, during the eleven years ending December 31, 1881.

Year.	Foreign trade inwards.							
	Cargo.				Ballast.			
	Sailing.		Steam.		Sailing.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1871	469	140,844	83	51,651	6	680	2	460
1872	438	154,004	70	38,149	2	309	2	1,167
1873	406	165,622	71	40,416	5	732	4	914
1874	453	157,995	79	43,322	3	496	3	1,123
1875	302	158,974	87	40,790	4	803	1	49
1876	392	163,347	109	45,288	1	92	2	1,334
1877	735	141,313	140	69,297	3	1,041	3	1,659
1878	350	150,573	100	52,019	1	439	2	714
1879	303	160,087	111	56,811	1	255	2	960
1880	299	132,996	189	113,332	1	471	6	3,391
1881	255	144,846	201	133,840	.....	.....	2	1,019

Year.	Foreign trade outwards.							
	Cargo.				Ballast.			
	Sailing.		Steam.		Sailing.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1871	213	47,234	13	5,571	84	23,451	36	17,589
1872	215	57,795	6	3,159	54	17,082	33	15,669
1873	151	43,125	7	4,369	109	35,757	45	23,503
1874	214	58,319	13	4,776	66	24,262	34	14,386
1875	193	54,046	35	11,956	28	19,141	33	14,945
1876	288	79,233	54	17,909	45	28,706	40	16,322
1877	178	54,086	55	18,933	94	36,453	61	32,209
1878	217	67,438	24	11,515	50	21,914	37	17,873
1879	193	53,453	49	25,911	31	15,695	45	18,567
1880	149	45,869	76	48,512	51	18,361	46	20,501
1881	147	47,180	79	54,015	21	10,614	36	16,049

Number and tonnage of vessels employed in the foreign and coasting trades of Dundee, Scotland, &c.—Continued.

Year.	Coasting trade.							
	Inwards.				Outwards.			
	Sailing.		Steam.		Sailing.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1871	427	36,026	495	171,009	276	24,403	256	86,749
1872	356	31,670	435	150,519	202	23,469	238	86,293
1873	572	50,107	425	144,764	201	19,224	260	92,066
1874	509	39,661	541	162,478	224	17,211	280	95,394
1875	463	33,028	593	179,881	299	44,945	290	101,935
1876	378	25,204	705	181,764	251	19,282	361	110,192
1877	372	28,285	707	195,315	210	17,741	336	113,057
1878	236	18,746	666	189,420	123	11,715	297	113,804
1879	296	21,490	820	219,008	315	70,601	812	220,245
1880	218	19,818	730	219,234	259	57,181	729	235,754
1881	274	23,749	669	209,289	316	76,997	703	243,454

NOTE.—The coasting trade for 1879 and subsequent years includes vessels having no customs clearances, which were not included in former years.

This statement shows several satisfactory features. The tonnage of vessels arriving in 1881 with cargoes from foreign ports has increased by 32,000 tons as compared with the previous year. This increase is made up of about 12,000 tons on sailing ships and 20,000 on steamers. The number of sailing vessels coming to this port with cargo from abroad has decreased by 44, and the steamers have increased by 12. This indicates that the sailing ships have been of larger size than those visiting the port in 1880, and that steamers employed in bringing raw material for the local trade continue to increase in tonnage. No sailing vessels have come from abroad in ballast, and only 2 steamers have failed to fetch cargoes, as against 1 ship and 6 steamers in ballast for 1880. The foreign trade outwards has increased by nearly 8,000—2 ships fewer and 3 steamers more having left Dundee with goods for abroad. In the coasting trade it is notable that the number of sailing vessels employed has greatly increased, while the number of steamers has largely decreased. Outwards, the number of sailing vessels increased from 259 to 316, an increase of 20,000 tons. The number of steamers inwards has in the same time decreased from 730 to 669, a decrease of 10,000 tons. Outwards the steamers have decreased from 729 to 703, the tonnage, however, showing an increase of about 8,000 tons. This shows that steamers employed in the coasting trade are likewise tending to be of larger size.

The next subjoined table is according to form 129, prescribed in paragraph 555 of United States Consular Regulations, 1881, as nearly complete as can be obtained here.

Return showing the nationality and the number and tonnage of vessels entered and cleared in cargo and ballast in the foreign trade during the year ending September 30, 1882, at Dundee, Scotland.

Cargo.

Nationality.	Entered.						Cleared.					
	Steamers.		Sailing vessels.		Total.		Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
British	121	88,033	114	119,969	235	208,002	15	14,720	19	16,980	34	31,700
Russian	11	5,860	2	433	13	6,293			6	1,173	6	1,173
Swedish	2	1,026	9	1,512	11	2,538			10	1,877	10	1,877
Norwegian	8	2,216	113	30,568	12	32,784			84	20,392	84	20,392
Danish	2	1,064	10	1,457	121	2,521			9	1,091	9	1,091
German	5	1,751	40	6,935	45	8,686			33	5,602	33	5,602
Dutch			8	1,345	8	1,345			8	1,542	8	1,542
French			1	271	1	271						
Italian			5	2,885	5	2,885						
Greek			1	394	1	394						
Total	149	99,950	303	165,769	452	265,719	15	14,720	169	48,657	184	63,377

Ballast.

Nationality.	Entered.						Cleared.					
	Steamers.		Sailing vessels.		Total.		Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
British	6	6,069	1	246	7	6,315	28	13,251	6	1,557	34	14,808
Russian												
Swedish							1	591			1	591
Norwegian							1	265	20	5,988	21	6,253
Danish												
German							1	341			1	341
Dutch												
French												
Italian												
Greek												
Total	6	6,069	1	246	7	6,315	31	14,448	26	7,545	57	21,993

No United States vessels have arrived or departed from this port during the past two years.

DIRECT STEAMERS BETWEEN DUNDEE AND NEW YORK.

The question of forming a large and wealthy steamship company in Dundee to trade direct between this port and New York has been under the consideration of capitalists in this town, and the project advocated by the local press. The scheme, however, has taken no practical shape as yet. As New York is the great central market for all the manufactures of this district shipped to the United States; it is very necessary that Dundee should be in close and uninterrupted communication with that city. The Red Cross Line ran steamers between Dundee and New York for some time, but as these were not first-class vessels, and left at very irregular and long intervals, this company did not find favor, and

accordingly the steamers were withdrawn from the passage. Another shipping company has lately taken up this trade—the Furness Line. Their steamers are considered good, and are said to be able to discharge their cargoes at a suitable part of New York Harbor. The management of this company must be satisfactory in all respects for shippers here before success can be looked for in paying measure. It is believed such steamers would be well and steadily patronized by Dundee United States exporters, if they were of a large, high-class, powerful kind, worthy of the trade, run regularly at short intervals—every ten days at least—and delivered the goods at a convenient wharf in New York.

The difference in actual distance between Dundee and Liverpool and New York is not great even with the north of Scotland passage; so, if steamers were full-powered, the voyage from this port to New York should not exceed beyond a day more than from Liverpool. Money is so plentiful in Dundee that whenever a promising United States investment company is formed the amount of the capital stock required is applied for several times over. It is, therefore, surprising that American exporters here have not, ere this time, started a first-class line of steamers to trade direct between this port and the United States. Many of the manufacturers in this district find it profitable and convenient to be owners or partners in the vessels that bring their raw material—jute—to Dundee, and some of them think they might also find it equally to be their interest to be shareholders in a shipping company which would carry their manufactured articles to their principal markets in the United States.

THE SAILOR'S HOME, DUNDEE,

is a magnificent structure, built by a few philanthropic citizens of this town at a cost of $75,000, and opened this year. The institution occupies a prominent site, of easy access from all parts of the harbor, and is planned on the best models of sailors' homes in Great Britain, being complete in all the requirements necessary for making seamen comfortable. During the time the building has been open it has been most successful in attracting large numbers of seamen to lodge under its hospitable roof—more indeed, sometimes, than could be accommodated. It is gratifying to the generous friends of seamen here who so liberally subscribed funds to erect and furnish this handsome shelter to find that their goodness is being fully appreciated by the numerous sailors who visit this port preferring to live in the Home rather than in low boarding-houses.

Seamen's wages have fluctuated little at this port during the past year. The following are the average rates of wages that have been paid and are current at present:

	Per month.
First mates	$35 00
Second mates	25 00
Third mates	20 00
Carpenters	28 00
Cooks	22 50
Stewards	20 00
Able-bodied seamen	15 00

Freights from Calcutta to Dundee during the past year have been on the whole profitable to ship-owners, ranging from $12.50 to $18 per ton for sailing vessels via the Cape, and from $15 to $19 for steamers via the Suez Canal. Flax and tow and codilla have been brought cheaply to Dundee from Russia this year, averaging as follows, viz: From Riga, $5.75 per ton; Cronstadt, $5, and Archangel, $5.

DUNDEE HARBOR AND REVENUE.

The year ending May 31, 1882, has been the most prosperous for the harbor in the history of this port. This year larger sums have been spent out of revenue on works and a larger installment has been paid to the sinking fund, yet a larger surplus is left than for several years past. The Dundee Harbor trustees have been lavish in spending money on all schemes calculated to improve the shipping facilities of this port in every respect. The river has been kept well dredged, more dock accommodation provided, a deep-water jetty built to enable large ships to discharge without lighterage, and patent hydraulic machinery furnished for insuring the quickest dispatch in the loading and unloading of vessels. The noticeable progress of the harbor, with its largely increasing revenues every year, has fully justified the liberal expenditure by the trustees.

The following table shows the harbor revenue, Dundee, Scotland:

Years ending May 31—	Amount.
	Pounds s. d.
1869	34,724 18 10½
1870	33,502 13 5
1871	40,638 18 0½
1872	43,915 3 11
1873	41,316 16 3½
1874	53,396 14 9½
1875	45,233 9 2½
1876	45,282 17 6
1877	50,751 18 3
1878	51,339 18 5
1879	46,906 14 3
1880	48,533 7 2
1881	50,163 9 5
1882	53,443 3 6

IMPORTS AND EXPORTS.

The principal articles imported (1) and exported (2) at the port of Dundee in two years ending 31st May, 1881 and 1882, respectively, are seen from the following comparative statements:

Articles.	1881.	1882.	Increase in 1882.	Decrease in 1882.
IMPORTS (1).				
Flax:				
Foreign.....tons.	22,264	32,227	9,963	.....
Coastwise.....do..	513	538	25	.....
Total flax.....do..	22,777	32,765	9,988	.....
Flax codilla:				
Foreign.....do..	6,877	9,010	2,133	.....
Coastwise.....do..	734	827	93	.....
Total flax codilla.....do..	7,611	9,837	2,226	.....
Hemp:				
Foreign.....do..	924	1,040	116	.....
Coastwise.....do..	198	233	35	.....
Total hemp.....do..	1,122	1,273	151	.....
Hemp codilla:				
Foreign.....do..	75	195	120	.....
Coastwise.....do..	1	8	7	.....
Total hemp codilla.....do..	76	203	127	.....
Jute:				
Foreign.....do..	122,824	152,710	29,886	.....
Coastwise.....do..	29,644	9,583	.....	20,061
Total jute.....do..	152,468	162,293	9,825	.....

Articles.		1881.	1882.	Increase in 1882.	Decrease in 1882.
IMPORTS (1)—Continued.					
Lime	do..	2,305	3,298	993	.....
Coals:					
Scotch	tons..	16,731	17,587	856	.....
English	do..	143,956	117,472	.....	26,484
Timber	loads.	39,649	42,886	3,237	.....
Iron	tons.	.....	4	4	.....
Guano	do..	801	385	.....	416
Tar	barrels.	3,663	2,294	.....	1,369
Whale and seal blubber	tuns.	2,509	2,572	63	.....
Whalebone	cwts.	1,007	585	.....	422
Flour	tons.	4,715	4,033	.....	682
Wheat	do..	8,658	9,728	1,070	.....
Indian corn	do..	1,378	.....	.....	1,378
Oats	do..	759	183	.....	576
Pease	do..	.....	.....	.....	.....
Tares	do..	1	.....	.....	1
Esparto	do..	4,428	3,566	.....	862
Barley	do..	.....	.....	.....	.....
EXPORTS (2).					
Linens and jute manufactures	tons.	51,120	58,242	7,122	.....
Bags and sacks	do..	27,728	19,295	.....	8,433
Yarns	do..	10,800	12,907	2,107	.....
Wheat	do..	3,522	3,179	.....	343
Barley	do..	3,170	918	.....	2,252
Oats	do..	161	403	242	.....
Cattle	number.	49	78	29	.....

WILLARD B. WELLS,
Consul.

UNITED STATES CONSULATE,
Dundee, October 10, 1882.

TARIFF OF THE UNITED STATES OF COLOMBIA.

REPORT BY CONSUL SMITH, OF CARTHAGENA.

FIRST CLASS.

Free.

1. Altars, chapels, and organs for churches.
2. Apparatus for gas lighting and producing it.
3. Arms and munitions of war that may be imported for the use of the constitutional governments of the states.
4. Rice, corn, potatoes, onions, lentils, sweet potatoes, chick peas, beans, and all classes of vegetables and fresh fruits.
5. The following articles intended for packing and filling with liquids: demijohns, large bottles, bottles large and small, flasks either of clay or glass, the common stuff made of hemp or heniquen, tarred or untarred water-proof paper used for packing.
6. Marble and jasper, flat paving stones.
7. Pipes for public aqueducts of districts.
8. Baggage of passengers not to exceed one hundred kilograms for each person; provided, however, the goods contained in it are for their personal use and that they are presented by them at the custom-house at the time of entry into Colombian territory. For any excess over the one hundred kilograms, 60 cents for each additional kilogram is charged.
9. Rough iron, zinc in sheets, materials composed of wire and iron to be used in the construction of bridges and prison houses; public clocks for the districts; materials and apparatus for public fountains.

10. Printed books of any class.
11. Machinery [not?] exceeding 1,000 kilograms in weight.
12. Any machinery, no matter what its weight, that may be imported for mining and agricultural purposes.
13. Sewing machines and their annexes, like crimping machines, &c.
14. Machines and their appurtenances for preparing coffee, imported totally or partially, the galvanized wire cloth for stoves, iron pipes, the fans and fanning apparatus, the iron roofs, and in general all goods and tools applicable for coffee machines.
15. Gold coins (lawful) not below the standard of those coined by the nation.
16. Monuments, statues, and iron rails intended for ornamentation of public buildings and squares.
17. Expressed juice of barley or other fermented or unfermented matter, either liquid or solid, intended for brewing purposes and the condensed beer.
18. Samples in small pieces, when their total weight does not exceed 25 kilograms.
19. Iron works that may be imported for the prison house of the State of Cundinamarca and for all the other state prisons in the republic.
20. Straw for making hats.
21. Lightning-rods, plows, and fire-engines.
22. Silver in bars and silver coins of 0.900 fine.
23. Filtering stones.
24. Lead in ingots, and quicksilver for mining purposes.
25. Presses, materials, and implements for printing offices, and for book binders and lithographers, including ink, blank paper, and pasteboards, for such purposes.
26. Iron bridges of any shape.
27. Subcarbonate of potash.
28. Subcarbonate of soda.
29. Implements and materials intended for establishing, sustaining, and improving public lighting.
30. Wine known as *common claret* like that produced at Catalonia, Bordeaux, &c., imported in barrels, casks, and demijohns.
31. Relates to building materials that may be imported into the State of Magdalena for erection of houses, &c., in said state.

SPECIAL CLASS.

The following articles under this head enter also *free* of import duties:
1. Wire for fences, staples for same, stretchers to fix it.
2. Live animals.
3. All articles imported for account of national government, whatever its nature be.
4. The following articles intended for packing: Empty barrels, casks, and hogsheads, erected or in pieces; common and rough wooden boxes in pieces, skillets for match-boxes and the sticks to make them.
5. Vessels erected or in pieces that may be imported to navigate the interior waters of Colombia.
6. Mineral coal.
7. Goods for the personal use of public ministers and diplomatic agents of foreign countries accredited near the Government of Colombia, provided the same courtesy is extended by their respective countries, and that the usual formalities are observed.
8. Wood or iron houses in pieces. The windows, doors, &c., when

coming alone, belong to the second class of the tariff (5 cents per kilogram).

9. Goods and implements that may be imported for the use of the Charity Hospital at Barranquilla, and its annexed free school for girls.

10. Hay and down, unmanufactured.

11. Ice, phosphates, seeds and shoots of plants.

12. Printed matter and labels or advertisements, with or without frames.

13. Printing machinery and materials imported for account of state governments.

14. Lumber for building purposes, such as beams, ties, boards, &c.

15. Machinery and apparatus applicable to the construction, improvement, and preservation of roads; for opening and sustaining canals for navigation; wagons, implements, and materials intended exclusively for railroads, and the materials for the construction of electric telegraphs.

16. Powdered marble, clay, cement, lime, rough or powdered, plaster of Paris, chalk, feldspar, silt, massicot, kaolin, powdered bone, and any other substance for the manufacture of earthenware.

17. Building materials; such as rough stones, clay, bricks, clay or stone paving.

18. Motors of any class or power, and machinery for industrial and mining enterprises.

19. Plants of any kind.

20. Potash or caustic soda, the ashes and salts of soda, the rosin, crude tallow, and pressed tallow unmanufactured.

21. Clothing for charitable institutions that may be under the inspection of public authority, and all the implements for same, and also goods for the personal use of the "Sisters of Charity" that may be employed at said institutions.

22. Natural products of Ecuador, Venezuela, Peru, and other nations to which such exemption has been or may be granted under agreement of reciprocity by public treaties.

23. Tiles in any form and of any matter, including shingles, roofing slate, galvanized sheet iron, and zinc for roofs.

24. Uniforms for the police at Bogota and for the chiefs and officers of the Colombian army.

25. Implements, apparatus, and other goods imported by the states for public primary and secondary instruction.

26. All implements, materials, apparatus, machinery, ships, and implements for erecting and repairing them, and, in general, anything imported for the navigation and the improvement of the Upper Magdalena.

27. Materials, tools, implements, and other articles imported by the company of the San Buenaventura road, in the State of Santander, intended for the construction and service of the railroad that will communicate the city of San José de Cucuta and the port of Villamizar on the river Zulia.

28. Goods about which exemption is obligatory in virtue of special stipulations in contracts entered into with the government, among which are the following:

Materials imported for the construction and working of the Antioquia railroad line up to five years after the work is completed and in public service; materials for the construction and working of the railroad from Buenaventura Bay up to the river Cauca for the shops, &c., during the construction of the road and up to five years after it is completed, as

well as the provisions and medicines and other goods this enterprise may require on the works. Among these exemptions must be included the merchandise exempted from import duties due to the franchise at several free ports of the Isthmus of Panama, the Archipelago of San Andres, and on the western region of the republic.

SECOND CLASS.

Pays 5 cents per kilogram.

1. Sulphuric acid.
2. Garlic.
3. Unprepared food, like cod-fish, pickled beef, hams not in tins, soup-paste and the like, nuts, &c.
4. Unprepared food not mentioned in the first class.
5. Tar.
6. The necessary apparatus and materials either of iron, copper, steel, bronze, or wood for duplicating and repairing vessels navigating the rivers and lakes of the Colombian territory, and for the iron bridges, wharves, land slides, electric telegraph, railroads, and for cleaning the canals, harbors, and ports.
7. Quicksilver, tin, and solder in bars, and tin caps for bottles.
8. Sugar.
9. Wooden buckets, hampers, or trays.
10. Scales in which more than a hundred kilograms can be weighed at a time.
11. Hydraulic pumps, with their respective pipes and fittings.
12. Common pitch, applicable in the construction of vessels.
13. Rope and rigging only applicable for the use of all kinds of vessels.
14. Cast-iron pots.
15. Cars and coaches of any description, without harness.
16. Black wax.
17. Beer or ale, in barrels, bottles, &c., and all classes of wines, excepting the common claret already mentioned in the first class.
18. Copper in sheets of any weight.
19. Crucibles.
20. Brooms, reed-mace, and mats.
21. Oakum, rope yarn, and felt-packing.
22. Iron manufactured into sheets or in small rods, not mentioned in the first class (rough iron), in bedsteads, in curry-combs, and in big chains, in safes; nails; kitchen furniture, tinned or untinned; large and bulky tools for agriculture, stone-cutting, and mining, such as hoes, picks, axes, bars, large axes, augers, machetes, shovels, big hammers, drilling apparatus, and tin or tinned iron sheets.
23. Flour made from wheat or any other grain, tapioca, and arrow root.
24. Tools for blacksmiths, carpenters, masons, stone-cutters, shoemakers, saddlers, silversmiths, tinsmiths, and miners.
25. Bone, not in powder, and unmanufactured horn.
26. Common or ordinary rosin or tallow soap.
27. Jasper and lithography stones, filtering stones, and flint.
28. Earthenware in crates and barrels.
29. Hops and cork.
30. Iron hoops for wheels, car-wheels, axles, springs, and cones.
31. Wooden cocks for casks and barrels.
32. Machinery, the total weight of which does not exceed 1,000 kilograms.

33. Wicks for lamps, candles, &c.
34. Common straw and reeds not manufactured.
35. Colored paper used for printing purposes.
36. Wrapping paper.
37. Tanned and untanned skins not manufactured.
38. Iron rammers imported for mining purposes.
39. Slates and slate pencils.
40. Unmanufactured lead.
41. Gunpowder for mines, and fuses for same.
42. Wooden doors, windows, rails, blinds, balusters, pipes, and pillars, or of any other matter for buildings, gardens, cemeteries, &c.
43. Tower clocks, including the dials and bells.
44. Wooden oars.
45. Hemp or canvas bags, or bags of other texture coarser than canvas, for packing export products.
46. Empty hemp, flax, or heniquen bags, tarred or untarred, with or without water-proof paper.
47. Saltpeter and nitric salt.
48. Empty earthen and other jars for packing.
49. Varnished hemp cloth for country houses and bridges.
50. Colored cement for buildings.
51. Writing ink.
52. Wooden, earthen, metal, and clay pipes, hose and gutters for pumps, canals and roofs, life buoys, and manufactured rubber for machinery and floors, excepting hose for fire-engines.
53. Plain glass, without mercury.

Anvils, blocks, and iron motors, tarred rope, and large bellows for forges.

THIRD CLASS.

Pays a duty of 20 cents per kilogram.

1. Steel bars or rods for manufacturing purposes and drilling machines.
2. "Florida," "Dirina," and Kananga waters.
3. Alabaster in any shape.
4. Prepared food, like salmon, hams in tins, &c., sweetmeats, preserved fruits, &c., pickles, and all classes of seasoning.
5. Anise-seed.
6. Harness for coaches and carts.
7. Sulphur and alum.
8. Common glue, varnishes, brushes, blacking, powdered and prepared paints and linseed oil.
9. Scales in which up to 100 kilograms can be weighed at a time.
10. Trunks made from any material.
11. Common bone, porcelain, rubber, and wooden buttons, without any cover.
12. Any bone buttons.
13. Pitch, not mentioned in any other class.
14. Candles, of any quality, and oil soap.
15. Color boxes and pencils.
16. Flax, or cotton manufactured into reins, fishing lines, rigging, packing thread and flax canvas.
17. Flax rope, not mentioned in any other class, and cotton canvas.
18. Pasteboard of any kind, except in playing cards, which pertain to the fifth class.
19. Boot and horse brushes.

20. Osier baskets.
21. Unmanufactured copper, copper pans, or any other article made of copper weighing more than 25 kilograms. (See No. 18 of second class.)
22. Cork in boards.
23. Crystal and glass in any form not mentioned in another class, not in jewelry and bugles, in which form it belongs to the fifth class.
24. Drugs and medicines, comprising saffron, powdered mustard, the alkalies, and salts of.
25. Small looking-glasses up to 25 centimeters.
26. Stearine, sperm, white and yellow wax in cakes.
27. Iron manufactured into wire, rings, hinges, and screws.
28. Wooden matches.
29. Bellows of any kind excepting the large ones, which pertain to the second class.
30. Uncovered trees and bows for saddles.
31. Flax thread for shoemakers, bristles, eyelets, metal nails and screws, and flax in ribbons and girths.
32. Tools for arts and industries not specified, comprising lasts, measures, &c., of any matter, and the elastic cloth.
33. Images for churches and chapels, statues and busts of any kind.
34. Mathematical and surgical instruments.
35. Musical instruments (not toys).
36. Liquids of any class, except perfumery pertaining to the fifth class.
37. Earthenware of any shape and matter, except that coming in crates and barrels, and the uncovered buttons.
38. Marble and jasper, not in paving stones or bricks, nor in lithography stones; the frames, moldings, and ornaments for furniture, and wooden veneers; organs not intended for churches.
39. Furniture of all classes with the exception of looking-glasses, which belong to the fourth class of the tariff, and the mattresses, cushions and other luxury; ornaments coming alone correspond to the class to which the principal matter of which they are made belongs, the cover of said ornaments is considered to be the principal matter of which they are made.
40. Paper for writing, marbled for hangings, gilt, silvered, and in any other form not mentioned.
41. Combs for horses.
42. Petroleum, kerosene or mineral oil, and naphtha.
43. Lead manufactured in any form excepting in toys, which belong to the fourth class, and in ingots intended for mining purposes, which belong to the first class.
44. Tobacco in leaf, and chewing tobacco.
45. Common cloth, prepared or varnished, for floors, and common oil cloth for coaches; oil cloth for table covers belongs to the fifth class.
46. Stationery, not mentioned herein before.
47. Gypsum or plaster of Paris in any form, except that mentioned in No. 16, of special class.
48. Unmanufactured zinc.

FOURTH CLASS.

Pays 40 cents per kilogram.

1. Manufactured steel not mentioned in any other place, nor in jewelry, which belongs to the fifth class.

2. Cotton, manufactured in white and colored thread and in any form, in blue fulas (a sort of thin, common cloth of a dark-blue color), in white or unbleached plain cloths without embroidery, sewing, or colors like those known as "domestics," "calico," "lencillo," "shirtings," and the like, excepting muslins, drills, and lawns, figured cloths, socks, caps, undershirts, ready made articles.

3. Arms of any class.

4. Bronze, manufactured in any form.

5. Crude and manufactured rubber in any form, except in cloths and jewelry, which belongs to the fifth class, and elastic boots, which belongs to the third class. (For rubber prepared for machinery and for floors and in pipes or hose, see No. 52 of the second class.)

6. Copper, manufactured in any form, except in jewelry and in caps for fire-arms (which belong to the fifth class), and in forms not mentioned in any of the above classes.

7. Hunting guns.

8. Looking-glasses measuring more than 25 centimeters.

9. Tin in any form, except in solder in bars.

10. Manufactured iron, in forms not designated in any other class.

11. Wax matches.

12. Toys, including perambulators, and velocipedes, and gymnastic goods.

13. Paints and portraits of any class and matter.

14. Blank books, ruled or unruled, and pocket-books.

15. Wood, paste, rubber, zinc, and any other metal in forms not designated before, not in jewelry, and in caps for fire-arms.

16. Implements, materials, and machinery for photographers.

17. Written music. Printed music belongs to the first class.

18. Gunpowder, not mentioned in another class nor in fireworks, in which form they belong to the fifth class.

19. Clocks.

20. Tea.

21. Flax cloths and thread, white or colored, not hereinbefore mentioned.

22. Implements, machinery, and materials for dentists.

23. Sporting implements not previously mentioned.

FIFTH CLASS.

Pays 60 cents per kilogram.

1. Arms and munitions of war, fine flax cloths, like white or striped jeans, long lawns, &c., as well as "guingas" imitating linen or cotton cloths of a similar width.

2. Spirits like brandy, cognac, rum, gin, whisky, &c.

3. All articles not excepted in the preceding articles, and those not mentioned as belonging to them.

SPECIAL CLASS.

1. Salt, the duties of which are 60 cents for import on each 12½ kilograms.

2. Boots for men, ready-made clothing, excepting socks, undershirts, and drawers, wooden furniture of any kind, and manufactured saddlery goods, on which there is an extra tax of 25 per cent. on the total duties calculated as fifth class of the tariff.

W. P. SMITH,
Consul.

UNITED STATES CONSULATE,
Carthagena, November 1, 1882.

PART II.—EXPORTS FROM EUROPE TO THE UNITED STATES.

BRITISH EXPORTS TO THE UNITED STATES.

REPORT BY CONSUL-GENERAL MERRITT, OF LONDON.

The following summary of the business transacted at the various consulates and commercial agencies in the United Kingdom of Great Britain and Ireland, during the year ending September 30, 1882, has been compiled from the reports of the respective consular officers, which, together with the returns of the consulate-general at London, are herewith transmitted, and your attention respectfully called thereto. A recapitulation of the aggregate of the declared value of exports to the United States for the ten years last past is also included.

The information furnished in this report has been obtained from the most trustworthy sources. The various tables have been prepared and arranged in view of furnishing, in convenient form, statistics which may prove of value for comparison.

I beg, also, to call your attention to the statement compiled at this consulate-general, showing the value of declared exports from the various consular districts to the United States during the four quarters, respectively, of the year ending September 30, 1882.

The following table exhibits the decreases and increases at the several consulates for the years 1881 and 1882:

DECREASES.

Exports to the United States.

Cork:	
This year a decrease of	$54,737
Last year a decrease of	128,769
Dublin:	
This year a decrease of	195,772
Last year an increase of	143,383
Gloucester:	
This year a decrease of	112,580
Last year an increase of	60,692
Tunstall:	
This year a decrease of	395,926
Last year an increase of	111,915

INCREASES.

Exports to the United States.

Belfast:	
This year an increase of	$1,556,526
Last year a decrease of	1,559,732

Birmingham:	
This year an increase of	$801,506
Last year a decrease of	543,821
Bradford:	
This year an increase of	1,294,244
Last year a decrease of	3,640,252
Bristol:	
This year an increase of	28,325
Last year a decrease of	19,198
Cardiff:	
This year an increase of	220,206
Last year an increase of	323,748
Dundee:	
This year an increase of	511,736
Last year a decrease of	843,095
Dunfermline:	
This year an increase of	515,249
Last year a decrease of	270,941
Falmouth:	
This year an increase of	31,495
Last year a decrease of	55,951
Glasgow:	
This year an increase of	496,483
Last year an increase of	503,303
Hull:	
This year an increase of	111,811
Last year a decrease of	274,893
Leeds:	
This year an increase of	1,936,535
Last year a decrease of	775,537
Leith:	
This year an increase of	148,359
Last year an increase of	39,257
Liverpool:	
This year an increase of	5,661,715
Last year a decrease of	13,469,760
London:	
This year an increase of	3,690,179
Last year a decrease of	12,131,146
Londonderry:	
This year an increase of	168,365
Last year a decrease of	1,057
Manchester:	
This year an increase of	2,235,079
Last year a decrease of	3,088,053
Newcastle-on-Tyne:	
This year an increase of	359,344
Last year an increase of	306,759
Nottingham:	
This year an increase of	1,307,244
Last year an increase of	1,329,508
Plymouth:	
This year an increase of	29,986
Last year an increase of	20,976
Sheffield:	
This year an increase of	261,978
Last year an increase of	776,077
Southampton:	
This year an increase of	46,426
Last year an increase of	111,915

BELFAST.

The decrease at this point in the year 1881, as compared with the preceding year, amounted to $1,559,732, or about sixteen and one-half per cent. This year the returns show an increase over the year 1881 of $1,556.526.39, or a net gain of nearly 20 per cent.

Over 80 per cent. of the declared exports consists of cottons and linens. The very full and satisfactory report of Consul Wood gives all the information which seems desirable at the present time, as to the manufacture of linens, which report I commend to the attention of the department.

The following figures show the value of declared exports for the past ten years:

Year ending September 30—	
1873	$7,460,197 10
1874	7,737,266 18
1875	7,243,160 36
1876	6,244,088 77
1877	6,640,559 13
1878	6,243,226 62
1879	7,328,156 19
1880	9,415,832 81
1881	7,856,100 68
1882	9,412,627 07
Total	75,581,214 91

BIRMINGHAM.

By comparing the figures in the subjoined table it will be seen that there is an increase for the year ending September 30, 1882, over that of the same period embraced in the year 1881, of $801,506.24, or over 18 per cent. In Consul King's report there is much valuable information, and I most respectfully call the attention of the department especially to that portion which bears upon the manufacture, testing, and stamping the official mark upon ships' cables, and also to the fact that Consul King has learned that the condemned cables are sold for export.

He also thinks "that well-made American buggies and light carriages, for carrying four or six people, such as are so common at New Jersey watering places, could be made quite popular.

Guns, hardware, cutlery, iron and steel are the chief commodities of this important district.

The following statistics show the declared value of exports for the past ten years:

Year ending September 30—	
1873	$7,463,185 72.49
1874	5,778,957 84.00
1875	4,791,231 29.00
1876	3,135,234 92.00
1877	2,842,871 05.00
1878	2,309,513 42.00
1879	2,435,271 89.00
1880	4,920,433 58.00
1881	4,376,611 92.00
1882	5,178,118 16.00
Total	43,231,429 79.49

BRADFORD.

The totals for the four quarters ending September 30, 1882, from this consular district show an increase over those of the preceding year of $1,294,244.02, or over 20 per cent.

Consul Grinnell in his report calls attention "to the rapidly increasing quantities of certain goods [stuffs, worsted coatings, &c.] sent forward, which, protected for them to the extent of 70 and 90 per cent., yet remain substantially a monopoly of the Bradford district."

The following figures show the course of trade for the last ten years:

Year ending September 30—	
1873	$15,900,091 72
1874	13,841,819 21
1875	11,629,262 15
1876	7,197,347 88
1877	7,311,101 75
1878	5,693,799 37
1879	5,955,287 85
1880	10,731,646 49
1881	7,091,394 13
1882	8,385,638 20
Total	93,737,388 80

BRISTOL.

The returns transmitted by Consul Lathrop show an increase for the year 1882 over the year 1881 of twenty per cent., or, in figures, $28,325.67. Chemicals form the principal articles of export. Mr. Lathrop assumed charge of this consulate on the 1st of October of the present year.

The declared value of exports from this center to the United States for the past ten years has been:

Year ending September 30—	
1873	$306,901 76
1874	305,863 06
1875	390,595 58
1876	217,427 57
1877	218,222 00
1878	166,648 20
1879	164,552 24
1880	157,177 01
1881	137,978 33
1882	166,304 00
Total	2,231,669 75

CARDIFF.

In the tabulated returns prepared by Consul Sikes for this district it will be found upon examination that there has been an advance credited to the year 1882 as against 1881 of $220,206.28, or nearly ten per cent.

Rails, tin, and terne-plates are the articles of chief importance, so far as quantity is concerned, which are declared for export to the United States.

The following are the statistics for the past ten years at this center, viz:

Year ending September 30—	
1873	$4,411,124 32
1874	497,161 78
1875	445,730 44
1876	155,294 69
1877	102,271 70
1878	296,903 74
1879	607,331 57
1880	1,824,812 07
1881	2,148,560 56
1882	2,368,766 84
Total	12,857,957 78

CORK.

The year last past, ending September 30, 1882, shows a decrease in the amount of goods exported to the United States from the above-named consulate district. The difference amounts to $54,737.74, or

about 30 per cent. Consul J. J. Piatt, who assumed the charge of this consulate in June last, reports that this decrease may be attributed to the general depression in local business.

The articles exported in greatest quantities are hides and leather.

The following figures give the declared value of exports for the past ten years, viz:

Year ending September 30—	
1873	$147,571 32
1874	115,374 35
1875	80,159 58
1876	37,455 01
1877	40,845 71
1878	53,203 07
1879	83,016 01
1880	308,024 93
1881	179,255 02
1882	124,517 29
Total	1,169,422 28

DUBLIN.

Returns from this consular district show an increase in the first quarter and a decrease in each of the three remaining quarters, making in the aggregate, as compared with the preceding year, 1881, a difference of $195,772.82, or nearly 17 per cent.

Ale, porter, and salted skins are the chief items of export.

The following figures give the value of exports for the past ten years, viz:

Year ending September 30—	
1873	$1,164,020 68
1874	928,900 81
1875	769,660 39
1876	639,550 65
1877	550,311 90
1878	583,162 66
1879	702,218 46
1880	1,022,415 77
1881	1,172,754 17
1882	276,981 35
Total	8,516,976 74

DUNDEE.

The figures for this district show an increase in the value of the declared exports for the year ending September 30, 1882, over that of 1881 of $511,736.99, or nearly 7 per cent.

Burlaps, linens, and yarn, relatively in the order named, furnish the staple articles of export.

The following figures give the declared value of exports from this district for the past ten years:

Year ending September 30—	
1873	$7,094,321 53
1874	6,685,688 74
1875	5,999,913 37
1876	5,473,143 70
1877	4,852,588 12
1878	4,641,560 47
1879	5,112,470 82
1880	8,224,285 20
1881	7,381,189 83
1822	7,892,926 32
Total	63,331,088 60

DUNFERMLINE.

The figures furnished by the consular officer, Mr. Myers, in charge of this commercial agency, show an increase for the year 1882 over and above the preceding year, amounting to $515,249.18, or over 27 per cent.

Linen goods rank as the staple of goods exported.

The following are the figures for the past five years, prior to which Dunfermline was an agency of the Leith consulate:

Year ending September 30—	
1873	An agency of the Leith consulate.
1874	
1875	
1876	
1877	
1878	$1,099,002 88
1879	1,443,045 32
1880	2,160,227 76
1881	1,889,286 45
1882	2,404,535 63
Total	8,996,098 04

FALMOUTH.

Returns from this consulate for the year 1882 show an increase of $31,494.74 over the figures given for the year 1881, or 40 per cent.

China clay and arsenic represent almost the entire exports.

The following statistics give the declared value of exports for the past ten years, viz:

Year ending September 30—	
1873	$54,052 30
1874	60,420 52
1875	57,487 85
1876	44,636 44
1877	53,451 77
1878	55,036 64
1879	67,253 47
1880	132,469 40
1881	76,517 79
1882	109,013 53
Total	709,339 71

GLASGOW.

The figures furnished by Consul Harte exhibit an increase for the present year, as compared with the preceding year, of $496,483.90, or over 5 per cent.

Thread, cotton, linens, and woolen goods are the articles chiefly exported.

The following figures show the course of trade at this center during the past ten years:

Year ending September 30—	
1873	$8,262,433 88
1874	6,337,818 61
1875	5,796,289 62
1876	5,101,128 94
1877	4,589,156 85
1878	4,249,000 00
1879	5,298,345 00
1880	9,219,927 80
1881	9,723,231 70
1882	10,219,715 60
Total	68,837,048 08

GLOUCESTER.

Returns from Commercial Agent Davis exhibit a considerable decrease for the present year, as compared with the year 1881. A falling off of $12,580.88 is attributed by Mr. Davis "mainly to the inability to procure vessels to take freights to the States." Tin plates take rank as chief article of export, followed by salt, and woolen goods.

The following are the figures for the past three years, viz:

Year ending September 30—	
1873	An agency of the Bristol consulate.
1874	
1875	
1876	
1877	
1878	
1879	
1880	$195,880 38
1881	256,572 62
1882	143,991 74
Total	596,444 74

HULL.

From the very complete and exhaustive report furnished by Mr. Howard, the consular officer of this district, an increase is to be noted for the year 1882 of $111,811.33, or over 40 per cent. as compared with the year 1881. Colors, hair, and potatoes were the chief articles exported.

The following are the figures as furnished for the past four years, prior to which Hull was an agency of the Leeds consulate.

Year ending September 30—	
1873	An agency of the Leeds consulate.
1874	
1875	
1876	
1877	
1878	
1879	$131,683 09
1880	547,247 23
1881	272,353 48
1882	384,164 81
Total	1,335,448 61

LEEDS.

Consul Dockery shows by the figures he has furnished that there was an increase for the year ending September 30, 1882, over the year 1881 of $1,936,535.80, over 68 per cent. Woolens, cottons, machinery, and hair goods are the chief articles exported.

The following figures represent the declared value of exports for the past ten years, viz:

Year ending September 30—	
1873	$4,868,277 08
1874	3,602,104 55
1875	3,626,535 43
1876	2,135,376 68
1877	1,704,327 58
1878	1,411,370 59
1879	1,556,965 96
1880	3,615,338 09
1881	2,839,801 07
1882	4,776,336 87
Total	30,136,433 90

LEITH.

The total value of declared exports at this consulate, as reported by Consul Leonard, for the year ending September 30, 1882, amounted to $735,938 67. For the year ending September 30, 1881, the value of goods exported amounted to $587,578.90, showing an increase in favor of the present year of $148,359.77, or a net gain of over 25 per cent. Books, as heretofore, constitute the chief item of export.

The following are the declared values of exports from this center for the past ten years:

Year ending September 30—	
1873	$2,996,418 26
1874	1,862,032 28
1875	2,294,385 65
1876	1,779,976 39
1877	1,671,257 79
1878	611,810 09
1879	368,939 12
1880	548,321 12
1881	587,578 90
1882	735,938 67
Total	13,456,657 67

LIVERPOOL.

It is almost unnecessary to premise that in making the necessarily limited remarks concerning this, the principal steam port of the world, that a very able and exhaustive report has been compiled by Consul Packard, and that from this I have taken the few figures and extracts noted below.

Trade, upon the whole, has been unusually brisk and flourishing; showing improvement upon the year 1880, which also was one of fair prosperity.

The value of total imports, both colonial and foreign, was $525,855,385, of which the United States furnished $302,900,027.

Chief among the imports is cotton from the "States," to the value of $150,596,047, or 76 per cent. of the entire imports of cotton.

Prices ranged the lowest, May 12, 11¼ cents per pound; the highest, September 29, 15 cents per pound, and the year closed with steady market at 13 $\frac{3}{16}$ cents per pound. Cereals rank next in amount of values, with wheat first, to the value of $33,678,852; corn, $9,993,961, and wheat-meal and flour $9,141,428. Of bacon and hams, the United States furnished $31,863,675, and of cheese, $10,690,644 in value. In the item of lard, there was received at this port a quantity amounting in value to $6,944,816, and of fresh beef the value of $5,776,579.

Of the 16,824 vessels arriving during the year, 5,003 were from over the sea ports.

The total amount of declared exports for the United States for the year ending September 30, 1882, amounted to $34,781.520.69, of which tin plates furnished $9,007,267.58; chemicals, $5,059,693.45; pig iron, $2,333,428.15; wool, $2,171,781.40, and india rubber, $2,014,057.54.

An increase over the year 1881 is noted of $5,661,715.14, or over nineteen per cent.

The following statistics give the course of trade at this center for the past ten years:

Year ending September 30—	
1873	$36,095,983 86
1874	31,761,783 75
1875	27,307,312 61

Year ending September 30—	
1876	$22,947,802 20
1877	22,585,056 66
1878	19,084,235 15
1879	23,062,247 11
1880	42,589,566 16
1881	29,119,805 55
1882	34,781,520 69
Total	289,365,313 74

LONDON.

In the returns from this consulate-general for the last year, it was noted that there was a considerable decrease in the amount of goods declared for export in the first three quarters of the year, and a gain in the fourth quarter, the whole aggregating a net decrease of $12,131,146.73. The year ending September 30, 1882, shows an increase over the preceding year of $3,690,179.53, or a gain of nearly seven and one-quarter per cent.

The total amount of goods declared for export amounted to $54,240,152.97, of which iron, steel and metals form the principal items, reaching in value the sum of $22,536,040.56. Dry goods—woolens, silks, cottons, &c,—stand next upon the list, being credited with $4,835,565.96; followed by leather, hides, skins, and furs to the amount of $4,131,032.05; precious stones, nearly three millions; chemicals, books, and feathers, each, with over two millions.

The following figures show the total values of declared exports during the past ten years, viz:

Year ending September 30—	
1873	$36,883,557 37.55
1874	29,402,080 24.52
1875	25,602,624 67.66
1876	20,509,669 26.54
1877	22,72[illegible],837 83.75
1878	19,416,581 34.56
1879	24,420,872 05.08
1880	62,681,120 18.13
1881	50,549.973 44.21
1882	54,240,152 97.00
Total	346,435,469 39.00

General imports and exports.—The value of imports of all countries into London during the year 1881 was $680,382,839; as compared with $688,119,742 in 1880, a falling off of $7,736,903. About 35 per cent. of the whole import trade of the United Kingdom is done through this port.

The value of the exports was $285,007,658, an increase of $29,104,138 over the preceding year.

Shipping.—The total number of British and foreign vessels that entered the port of London during the year was 10,765, with a tonnage of 5,810,043; the clearances were 8,081 vessels, of 4,478,260 tonnage. The coastwise trade employed 38,953 vessels, of 4,545,904 tonnage. Forty American vessels entered the port during the twelve months ending September 30, 1882, as against 38 in 1881. The tonnage was 42,302.43, a decrease of 2,613.10 as compared with the preceding year.

The value of merchandise imported into London in American vessels for the year ending September 30, 1882, was about $2,299,825, while the exports so carried were valued at $515,810. In 1880 the imports were $5,549,220, and the exports $809,725.

LONDONDERRY.

Returns from this consular district show a marked increase, the figures being $169,918.81 for 1882, while for 1881 the amount for goods declared was only $1,552.93, showing an increase of $168,365.88.

This is accounted for in the single item of potatoes, of which there were exported to the United States the gross amount in value of $159,826.54, the necessity for which I trust will not occur again.

Below will be found a table showing the value of declared exports for the past ten years:

Year ending September 30—	
1873	$173,295 77
1874	50,757 47
1875	5,585 02
1876	6,248 07
1877	782 16
1878	1,797 66
1879	2,133 92
1880	2,610 03
1881	1,552 93
1882	169,918 81
Total	414,681 84

MANCHESTER.

Returns from this consulate show an increase for the year ending September 30, 1882, over 1881, of $2,235,079.99, or over 18 per cent.

This would seemingly show that trade at this great center had been in a most flourishing condition, but Consul Shaw reports that this last year has not been as favorable for all classes of manufacture as was predicted. Especially is this so with the cotton and mixed-goods manufacture, the productions of which constitute the staple article of export. He writes "that there seems to be an over-production which causes keen competition in disposing of yarn, thus forcing down prices to the lowest possible limit."

Growing competition abroad is the source of danger to manufacturers here, and this competition is more keenly felt at the present than at any previous time. He also reports that the complaints of the adulteration of American cotton have almost entirely ceased, which is most gratifying in view of the numerous and well-established grounds for complaint which had existed heretofore.

The following figures show the course of trade at this point for the past ten years, viz:

Year ending September 30—	
1873	$21,978,696 48
1874	19,339,295 72
1875	18,139,681 27
1876	10,141,092 94
1877	9,876,768 09
1878	8,176,866 53
1879	8,814,443 92
1880	15,236,381 28
1881	12,148,327 29
1882	14,383,407 28
Total	138,234,980 80

NEWCASTLE-ON-TYNE.

Consul Jones's returns show an increase of exports for the year ending September 30, 1882, over those of the year ending September 30, 1881, of $359,344.34; a net gain of over 13 per cent. Iron and steel take

precedence as articles of export, followed by soda. The consul also reports to the department that "the Tyne and northeastern district may be considered the cradle and stronghold of the large *dead-weight carrying* screw steamers, which constitute the bulk and indicate the supremacy of the British mercantile navy." His report on that subject is commended to the attention of the department.

The following table gives the exports at this center for the past ten years:

Year ending September 30—	
1873	$3,259,780 96
1874	1,179,818 65
1875	835,181 00
1876	839,007 29
1877	640,836 16
	107,863 09
1878	793,289 86
1879	1,018,306 44
1880	2,328,551 69
1881	2,635,311 35
1882	2,994,655 69
Total	16,632,602 18

NOTTINGHAM.

The figures received from the consular officer at this point show an increase for the year ending September 30, 1882, as compared with the year 1881, of $1,307,244.47, or nearly 16 per cent. In last year's report an increase of over 18 per cent. was noted, and it will be seen by comparing figures in the subjoined statement that shipments have increased over 200 per cent. within the last few years.

Laces form the chief article of export, hosiery being next in importance, followed by salted skins.

The following table furnishes the amounts of declared exports for the five years last past, prior to which time Nottingham was an agency of the Sheffield consulate:

Year ending September 30—	
1873	An agency of the Sheffield consulate.
1874	
1875	
1876	
1877	
1878	3,062,216 71.00
1879	4,421,233 42.00
1880	7,137,796 16.00
1881	8,467,304 18.00
1882	9,774,548 65.00
Total	32,863,099 12.00

PLYMOUTH.

Returns from this consulate again show an important increase. The year 1881 showed an increase of nearly 55 per cent. over the preceding. The year ending September 30, 1882, shows an increase over 1881 of $29,986.51, or over 50 per cent. China clay is the chief article of export.

The declared values of exports from this center for the past ten years are as follows:

Year ending September 30—	
1873	$37,594 90.00
1874	22,038 70.00
1875	4,989 56.00
1876	1,620 26.00
1877	21,071 69.00

Year ending September 30—	
1878	$21,473 92.20
1879	10,611 34.00
1880	38,154 94.00
1881	59,130 95.00
1882	89,117 46.00
Total	305,794 72.20

SHEFFIELD.

The increase at this consulate for the year ending September 30, 1882, over and above the exports of the previous year, amounts to $261,978.65, or over 4 per cent. The chief article of export consists of Bessemer steel rails, supplemented by steel and cutlery.

As the amount in value of Bessemer steel rails exported this year to the United States nearly reaches that of 1874, in which latter-named year the greatest amount in value was shipped to the United States, and as the price has diminished nearly one-half, it follows that this year nearly double the quantity has been forwarded to the United States.

The following statistics furnish the value of declared exports from this place for the past ten years:

Year ending September 30—	
1873	$14,197,614 72.00
1874	11,309,037 51.00
1875	7,725,718 08.00
1876	5,698,197 78.00
1877	5,720,231 20.00
1878	2,140,443 49.00
1879	2,723,943 18.00
1880	5,189,692 84.00
1881	5,955,769 89.00
1882	6,217,748 54.00
Total	66,878,497 23.00

SOUTHAMPTON.

The returns from this district show an increase of $46,426.99 over that of 1881, or over 100 per cent. In 1881 nearly 51½ per cent. of the gross amount exported from and through this consulate consisted of live stock. For the year ending September 30, 1882, the same item has increased to over 90 per cent.

The following statistics indicate the course of trade at this center with the United States during the past nine years:

Year ending September 30—	
1873	$39,774 58.00
1874	17,662 67.00
1875	9,786 58.00
1876	20,653 69.00
1877*	
1878	44,536 28.00
1879	64,189 22.00
1880	34,532 49.00
1881	43,938 67.40
1882	90,365 87.00
Total	365,440 25.40

TUNSTALL.

The potteries of this consular district, together with their products, are world renowned, and earthenware forms the chief article of export—

*During this period Southampton was an agency of London.

almost, in fact, the only item. Nearly 34½ per cent., during the present year, has been shipped to the United States, and, from data given, it is found that fully one-half of the pottery productions of Great Britain find ready market with American consumers.

A decrease in the first three-quarters of the year ending September 30, 1882, is explained by Consul Lane, in his very valuable report, "as the result of a strike among the pottery operators, which occurred during the first quarter of the year named." Consul Lane calls attention to important information he has received concerning the manufacture of pottery in England, as compared with that of American manufacture, which, I doubt not, would prove of value to those engaged in this industry in the United States; and among other ideas advanced is the suggestion that English and American clays be subjected to thorough chemical analyses.

The following statistics give the value of declared exports for the last ten years:

Year ending September 30—	
1873	$4,211,584 33.45
1874	2,913.201 94.65
1875	2,722,526 55.55
1876	2,568,707 12.00
1877	2,428,483 17.00
1878	2,604,681 77.00
1879	2,687,476 73.00
1880	3,703,844 73.00
1881	3,815,760 65.00
1882	3,419,833 88.00
Total	31,076,100 93.65

Statement compiled from Forms D showing the value of declared exports from the various consular districts of the United States of America in the United Kingdom of Great Britain and Ireland for the four quarters of the year ending September 30, 1881.

Consular districts.	Quarters ending—				Total for the year.
	December 31, 1880.	March 31, 1881.	June 30, 1881.	September 30, 1881.	
Belfast	$1,770,411 41	$2,447,861 83	$1,410,859 64	$2,226,967 80	$7,856,100 68
Birmingham	1,034,377 48	1,047,567 36	958,781 58	1,335,885 50	4,376,611 92
Bradford	1,082,233 95	2,518,763 49	1,349,822 25	2,140,574 49	7,091,394 18
Bristol	43,175 06	33,051 98	29,956 49	31,794 80	137,978 33
Cardiff	534,511 23	355,072 60	809,438 47	449,538 26	2,148,560 56
Cork	36,473 76	46,702 55	54,675 88	41,402 83	179,255 02
Dublin	345,375 49	289,142 96	272,340 00	265,895 72	1,172,754 17
Dundee	1,535,927 66	2,042,428 16	1,571,616 04	2,231,217 97	7,381,189 83
Dunfermline	352,949 71	591,334 99	282,374 20	662,627 55	1,889,286 45
Falmouth	21,965 21	17,695 75	13,622 80	23,234 03	76,517 79
Glasgow	1,792,903 22	3,692,431 99	1,668,536 43	2,569,060 06	9,723,231 70
Gloucester	50,790 88	67,834 22	60,697 12	77,250 49	256,572 62
Hull	58,971 10	82,267 68	56,536 92	74,577 78	272,853 48
Leeds	356,063 32	908,952 28	552,425 99	1,022,359 48	2,839,801 07
Leith	132,300 53	148,853 12	163,349 34	143,075 91	587,578 90
Liverpool	7,258,103 98	6,685,734 28	7,199,138 13	7,976,829 16	29,119,805 55
London	9,149,440 79	11,512,379 43. 58	14,206,956 06. 54	15,681,197 15. 09	50.549,973 44. 21
Londonderry	655 72	248 49	30 66	618 06	1,552 93
Manchester	2,338,203 77	3,387,599 17	2,648,835 88	3,773,688 47	12,148,327 29
Newcastle	566,528 09	668,427 60	799,756 36	600,599 30	2,635,311 35
Nottingham	1,605,464 45	2,603,526 41	1,583,683 82	2,674,629 50	8,467,304 18
Plymouth	3,481 31	11,072 33	18,850 11	25,727 20	59,130 95
Sheffield	1,174,805 48	1,369,074 27	1,754,799 34	1,657,090 80	5,955,769 89
Southampton	5,758 32	10,609 98. 40	12,271 84. 05	15,298 77. 95	43,938 87. 40
Tunstall	922,224 82	984,919 92	978,261 40	935,354 51	3,815,760 65
Total	32,173,096 74. 00	41,528,552 79. 98	38,452,916 75. 59	46,636,495 51. 04	158,786,061 80. 61

Statement compiled from Forms D showing the value of declared exports at the various consular districts of the United States in the United Kingdom for the four quarters of the year ending September 30, 1882, and compared with the corresponding quarter of the previous year.

Consular districts.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Belfast	$2,202,008 21	$3,044,107 22	$1,832,146 19	$2,334,365 45	$9,412,627 07
Birmingham	1,275,197 23	1,118,944 33	1,257,801 82	1,526,174 78	5,178,118 16
Bradford	2,010,163 17	2,137,425 32	1,728,535 30	2,509,514 41	8,385,638 20
Bristol	35,528 17	41,656 71	37,014 70	52,104 42	166,304 00
Cardiff	651,194 23	448,997 64	570,291 53	678,283 44	2,368,766 84
Cork	50,051 03	12,900 42	34,421 74	27,144 09	124,517 28
Dublin	356,495 87	264,507 12	167,212 19	188,766 17	976,981 35
Dundee	1,922,325 82	2,210,174 53	1,733,330 87	2,026,595 80	7,892,926 82
Dunfermline	535,470 65	700,168 00	441,449 19	727,447 79	2,404,535 63
Falmouth	27,986 96	52,184 07	14,562 01	13,280 49	108,013 53
Glasgow	2,539,697 74	3,017,317 24	2,178,749 09	2,483,951 53	10,219,715 60
Gloucester	32,474 88	36,442 76	28,265 06	46,809 04	143,991 74
Hull	73,477 77	124,000 08	95,964 86	90,722 10	384,164 81
Leeds	849,597 87	1,296,598 44	1,065,487 60	1,564,652 96	4,776,336 87
Leith	178,441 86	163,237 60	170,867 77	223,391 44	735,938 67
Liverpool	8,908,198 61	8,275,113 55	8,499,891 44	9,098,317 09	34,781,520 69
London	13,398,092 06	13,311,635 21	14,100,844 02	13,429,581 68	54,240,152 97
Londonderry	6,596 36	141,120 22	20,933 61	1,268 62	169,918 81
Manchester	3,118,975 58	4,179,349 34	3,024,932 43	4,060,149 93	14,383,407 28
Newcastle	501,982 80	716,742 50	1,029,706 97	746,223 42	2,994,655 69
Nottingham	2,270,439 45	3,015,469 50	2,018,805 16	2,469,834 54	9,774,548 65
Plymouth	55,185 15	3,667 60	13,786 36	16,478 35	89,117 46
Sheffield	1,484,173 92	1,628,678 80	1,588,623 01	1,516,272 81	6,217,748 54
Southampton	12,667 19	874 85	55,505 61	21,318 22	90,365 87
Tunstall	692,905 16	885,187 47	881,212 33	960,528 92	3,419,833 8
Total	43,189,827 74	46,826,500 82	42,590,340 36	46,833,177 49	179,439,846 41

December 31, 1881	$43,189,827 74.00	June 30, 1882	$42,590,340 36.00	Increase:	
December 31, 1880	32,173,096 74.00	June 30, 1881	38,452,916,75.59	December quarter	$11,016,731 00.00 or more than 34 per cent.
Increase	11,016,731 00.00	Increase	4,137,433 60 41	March quarter	5,302,948 02.02 or nearly 13 per cent.
				June quarter	4,137,423 60.41 or nearly 11 per cent.
March 31, 1882	46,826,500 82.00	September 30, 1882	46,833,177 49.00	September quarter	196,681 97,96 or less than 1 per cent.
March 31, 1881	41,523,552 79,98	September 30, 1881	46,636,495 51.04	Total increase for the year ending September 30, 1882.	20,653,784 60.39 or more than 11 per cent.
Increase	5,302,948 02.02	Increase	196,681 97.96		

Statement showing value of declared exports from the various consular districts of the United Kingdom of Great Britain and Ireland to the United States of America, from October 1, 1872, to September 30, 1882.

[Compiled at the consulate-general, London.]

BELFAST.

Year ending September 30—		
1873	$7,460,197 10.00	
1874	7,737,266 18.00	
1875	7,243,160 36.00	
1876	6,244,088 77.00	
1877	6,640,559 13.00	
1878	6,243,226 62.00	
1879	7,328,156 19.00	
1880	9,415,832 81.00	
1881	7,856,100 68.00	
1882	9,412,627 07.00	
		$75,581,214 91.00

BIRMINGHAM.

Year ending September 30—		
1873	$7,463,185 72.49	
1874	5,778,957 84.00	
1875	4,791,231 29.00	
1876	3,135,234 92.00	
1877	2,842,871 05.00	
1878	2,309,513 42.00	
1879	2,435,271 89.00	
1880	4,920,433 58.00	
1881	4,376,611 92.00	
1882	5,178,118 16.00	
		43,231,429 79.49

BRADFORD.

Year ending September 30—		
1873	$15,900,091 72.00	
1874	13,841,819 21.00	
1875	11,629,262 15.00	
1876	7,197,347 88.00	
1877	7,311,101 75.00	
1878	5,693,799 37.00	
1879	5,955,287 85.00	
1880	10,731,646 49.00	
1881	7,091,394 18.00	
1882	8,385,638 20.00	
		93,737,388 80.00

BRISTOL.

Year ending September 30—		
1873	$306,901 76.00	
1874	305,863 06.00	
1875	390,595 58.00	
1876	217,427 57.00	
1877	218,222 00.00	
1878	166,648 20.00	
1879	164,552 24.00	
1880	157,177 01.00	
1881	137,978 33.00	
1882	166,304 00.00	
		2,231,669 75.00

CARDIFF.

Year ending September 30—		
1873	$4,411,124 39.00	
1874	497,161 78.00	
1875	445,730 44.00	
1876	155,294 69.00	
1877	102,271 70.00	
1878	296,903 74.00	
1879	607,331 57.00	
1880	1,824,812 07.00	
1881	2,148,560 56.00	
1882	2,368,766 84.00	
		$12,857,957 [illegible]

CORK.

Year ending September 30—		
1873	$147,571 32.00	
1874	115,374 35.00	
1875	80,159 58.00	
1876	37,455 01.00	
1877	40,845 71.00	
1878	53,203 07.00	
1879	83,016 01.00	
1880	308,024 93.00	
1881	179,255 02.00	
1882	124,517 28.00	
		1,169,422 28.[illegible]

DUBLIN.

Year ending September 30—		
1873	$1,164,020 68.00	
1874	928,900 81.00	
1875	769,660 39.00	
1876	639,550 65.00	
1877	550,311 80.00	
1878	583,162 66.00	
1879	702,218 46.00	
1880	1,029,415 77.00	
1881	1,172,754 17.00	
1882	976,981 35.00	
		8,516,976 74.00

DUNDEE.

Year ending September 30—		
1873	$7,094,321 53.00	
1874	6,685,688 74.00	
1875	5,999,913 37.00	
1876	5,473,143 70.00	
1877	4,825,588 12.00	
1878	4,641,560 47.00	
1879	5,112,470 82.00	
1880	6,224,285 20.00	
1881	7,381,189 83.00	
1882	7,892,926 82.00	
		63,331,088 60.00

DUNFERMLINE.

Year ending September 30—		
1873	Hitherto an agency of the Leith consulate.	
1874		
1875		
1876		
1877		
1878	$1,099,002 88.00	
1879	1,443,045 32.00	
1880	2,160,227 76.00	
1881	1,889,286 45.00	
1882	2,404,535 63.00	
		8,996,098 04.00

FALMOUTH.

Year ending September 30—		
1873	$54,052 30.00	
1874	60,420 52.00	
1875	57,487 85.00	
1876	44,636 44.00	
1877	53,451 77.00	
1878	55,036 64.00	
1879	67,253 47.00	
1880	132,469 40.00	
1881	76,517 79.00	
1882	108,013 53.00	
		$709,339 71.00

GLASGOW.

Year ending September 30—		
1873	8,262,433 88.00	
1874	6,377,818 61.00	
1875	5,796,289 62.00	
1876	5,101,128 94.00	
1877	4,589,156 85.00	
1878	4,249,000 00.00	
1879	5,298,345 00.00	
1880	9,219,927 88.00	
1881	9,723,231 70.00	
1882	10,219,715 60.00	
		68,837,048 08.00

GLOUCESTER.

Year ending September 30--		
1873	Hitherto an agency of the Bristol consulate.	
1874		
1875		
1876		
1877		
1878		
1879		
1880	$195,880 38.00	
1881	256,572 62.00	
1882	143,991 74.00	
		596,444 74.00

HULL.

Year ending September 30—		
1873	Hitherto an agency of the Leeds consulate.	
1874		
1875		
1876		
1877		
1878		
1879	$131,683 09.00	
1880	547,247 23.00	
1881	272,353 48.00	
1882	384,164 81.00	
		1,335,448 61.00

LEEDS.

Year ending September 30—		
1873	$4,868,277 08.00	
1874	3,602,104 55.00	
1875	3,626,535 43.00	
1876	2,135,376 68.00	
1877	1,704,327 58.00	
1878	1,411,370 59.00	
1879	1,556,965 96.00	
1880	3,615,338 09.00	
1881	2,839,801 07.00	
1882	4,776,336 87.00	
		30,136,433 90.00

LEITH.

Year ending September 30—		
1873	$2,996,418 26.00	
1874	1,862,032 28.00	
1875	2,294,385 65.00	
1876	1,779,976 39.00	
1877	1,671,257 79.00	
1878	611,810 09.00	
1879	368,939 12.00	
1880	548,321 12.00	
1881	587,578 90.00	
1882	735,938 67.00	
		$13,456,658 27.00

LIVERPOOL.

Year ending September 30—		
1873	$36,095,983 86.00	
1874	31,791,783 75.00	
1875	27,307,312 61.00	
1876	22,947,802 20.00	
1877	22,585,056 66.00	
1878	19,084,235 15.00	
1879	23,062,247 11.00	
1880	42,589,566 16.00	
1881	29,119,805 55.00	
1882	34,781,520 69.00	
		289,365,313 74.00

LONDON.

Year ending September 30—		
1873	$36,883,557 37.55	
1874	29,402,080 24.52	
1875	25,602,624 67.66	
1876	20,509,669 26.54	
1877	22,728,837 83.75	
1878	19,416,581 34.56	
1879	24,420,872 05.08	
1880	62,681,120 18.13	
1881	50,549,973 44.21	
1882	54,240,152 97.00	
		346,435,469 39.00

LONDONDERRY.

Year ending September 30—		
1873	$173,295 77.00	
1874	50,757 47.00	
1875	5,585 02.00	
1876	6,248 07.00	
1877	782 16.00	
1878	1,797 66.00	
1879	2,133 92.00	
1880	2,610 03.00	
1881	1,552 93.00	
1882	169,918 81.00	
		414,681 84.00

MANCHESTER.

Year ending September 30—		
1873	$21,978,696 48.00	
1874	19,339,295 72.00	
1875	18,139,681 27.00	
1876	10,141,092 94.00	
1877	9,876,768 09.00	
1878	8,176,886 53.00	
1879	8,814,443 92.00	
1880	15,236,381 28.00	
1881	12,148,327 29.00	
1882	14,383,407 28.00	
		138,234,980 80.00

NEWCASTLE-ON-TYNE.

Year ending September 30—		
1873	$3,259,780 96.00	
1874	1,179,818 65.00	
1875	835,181 00.00	
1876	839,007 29.00	
1877	640,836 16.00	
	*107,863 09.00	
1878	793,289 86.00	
1879	1,018,306 44.00	
1880	2,328,551 69.00	
1881	2,635,311 35.00	
1882	2,994,655 69.00	
		$16,632,602 18.00

NOTTINGHAM.

Year ending September 30—		
1873	Hitherto an agency of the Sheffield consulate.	
1874		
1875		
1876		
1877		
1878	$3,062,216 71.00	
1879	4,421,233 42.00	
1880	7,137,796 16.00	
1881	8,467,304 18.00	
1882	9,774,548 65.00	
		32,863,099 12.00

PLYMOUTH.

Year ending September 30—		
1873	$37,594 90.00	
1874	22,038 70.00	
1875	4,980 56.00	
1876	1,620 26.00	
1877	21,071 69.00	
1878	21,473 92.20	
1879	10,611 34.00	
1880	38,154 94.00	
1881	59,130 95.00	
1882	89,117 46.00	
		305,794 72.20

SHEFFIELD.

Year ending September 30—		
1873	$14,197,614 72.00	
1874	11,309,037 51.00	
1875	7,725,718 08.00	
1876	5,698,197 78.00	
1877	5,720,331 20.00	
1878	2,140,443 49.00	
1879	2,723,943 18.00	
1880	5,189,692 84.00	
1881	5,955,769 89.00	
1882	6,217,748 54.00	
		66,878,497 23.00

SOUTHAMPTON.

Year ending September 30—		
1873	$39,774 58.00	
1874	17,662 67.00	
1875	9,786 58.00	
1876	20,653 69.00	
1877	----------	
1878	*44,536 28.00	
1879	64,189 22.00	
1880	34,532 49.00	
1881	43,938 87.40	
1882	90,355 87.00	
		365,440 25.40

*This amount represents the exports for the September quarter of 1878. Southampton having only at the commencement of that quarter been erected into a consulate, the four quarters of the year 1877 and the first three quarters of 1878, were embodied in the returns of the consulate-general at London, of which Southampton was during that period an agency.

TUNSTALL.

Year ending September 30—		
1873	$4,211,584 33.45	
1874	2,913,201 94.65	
1875	2,722,526 55.55	
1876	2,568,707 12.00	
1877	2,428,483 17.00	
1878	2,604,681 77.00	
1879	2,687,476 73.00	
1880	3,703,844 73.00	
1881	3,815,760 65.00	
1882	3,419,833 88.00	
		$31,076,100 88.65

SUMMARY.

Gross total for the year ending September 30—		
1873	$177,006,478 72.49	
1874	143,819,084 59.17	
1875	125,477,808 06.21	
1876	94,893,660 25.54	
1877	94,552,132 21.75 *107,863 09.00	
	94,659,995 30.75	
1878	82,760,380 46.76	
1879	98,479,994 32.08	
1880	191,973,290 22.13	
1881	158,786,061 80.61	
1882	179,439,846 41.00	
Gross total for the ten years ending September 30, 1882		1,347,296,600 16.74

Recapitulation for the ten years ending September 30, 1882.

London	$346,435,469 39.00	Leith	$13,456,658 27.00
Liverpool	289,365,313 74.00	Cardiff	12,857,957 78.00
Manchester	138,234,980 80.00	Dunfermlinet	8,996,098 04.00
Bradford	93,737,388 80.00	Dublin	8,516,976 74.00
Belfast	75,581,214 91.00	Bristol	2,231,669 75.00
Glasgow	68,837,048 08.00	Hull‡	1,335,448 61.00
Sheffield	66,876,497 23.00	Cork	1,169,422 28.00
Dundee	63,331,088 60.00	Falmouth	709,339 71.00
Birmingham	43,231,429 79.49	Gloucester§	596,444 74.00
Tunstall	31,076,100 88.65	Londonderry	414,681 84.00
Nottingham*	32,863,099 12.00	Southampton	365,440 25.40
Leeds	30,136,433 90.00	Plymouth	305,794 72.20
Newcastle	16,632,602 18.00		
			1,347,296,600 16.74

Recapitulation for the year ending September 30, 1882.

London	$54,240,152 97.00	Dunfermline	$2,404,535 63.00
Liverpool	34,781,520 69.00	Cardiff	2,368,766 84.00
Manchester	14,383,407 28.00	Dublin	976,981 35.00
Glasgow	10,219,715 60.00	Leith	735,938 67.00
Nottingham	9,774,548 65.00	Hull	384,164 81.00
Belfast	9,412,627 07.00	Londonderry	169,918 81.00
Bradford	8,385,638 20.00	Bristol	166,304 00.00
Dundee	7,892,926 82.00	Gloucester	143,991 74.00
Sheffield	6,217,748 54.00	Cork	124,517 28.00
Birmingham	5,178,118 16.00	Falmouth	108,013 53.00
Leeds	4,776,336 87.00	Southampton	90,365 87.00
Tunstall	3,419,833 88.00	Plymouth	89,117 46.00
Newcastle	2,994,655 69.00		
			179,439,846 41.00

* These figures represent the amount of exports from the Newcastle agencies, not embodied in the consular report of 1877.

† These figures represent only the declared value of exports for the five years ending September 30, 1882, those for the previous years being embodied in the reports from Sheffield and Leith, of which consulates Nottingham and Dunfermline were agencies.

‡ These figures represent only the declared value of exports for the four years ending September 30, 1882, those for the previous years being embodied in the reports from Leeds, of which consulate Hull was an agency.

§ These figures represent only the declared value of exports for the three years ending September 30, 1882, those for the previous years being embodied in the reports from Bristol, of which consulate ...ter was an agency.

BELFAST.

Statement showing the value of declared exports from the consular district of Belfast to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Linens and cottons	$1,872,844 55	$2,544,275 37	$1,548,512 35	$2,049,205 88	$8,014,838 15
Flax, hemp, and yarns	209,451 77	225,793 82	163,633 95	173,060 39	771,939 93
Ginger ale, &c	21,107 28	29,787 02	31,663 65	48,442 76	131,000 71
Felt	8,867 71	7,195 58	8,172 01	7,638 91	31,874 21
Whisky and wine	11,861 42	2,64754	2,017 02	4,313 06	20,839 04
Iron ore	10,127 19	.....	.....	1,600 97	11,728 16
Machinery and hardware	1,118 64	30,456 05	55,444 72	6,241 50	93,260 91
Terra-alba	419 95	1,823 11	.....	.....	2,243 06
Hides	31,187 16	11,861 22	2,603 57	14,762 52	60,417 47
Books and stationery	27,503 06	9,033 55	9,242 95	25,369 51	71,149 37
Potatoes	4,244 95	178,188 72	7,145 47	.....	189,579 14
Sundries	3,274 53	3,041 94	3,710 50	3,729 95	13,756 92
Total for the year	2,202,008 21	3,044,107 22	1,872,146 19	2,334,365 45	9,412,627 07
Total for preceding year	1,770,411 41	2,047,861 83	1,410,859 64	2,226,967 80	7,856,100 68
Increase	431,596 80	596,245 39	421,286 55	107,397 65	1,556,526 39

A. B. WOOD,
Consul.

BIRMINGHAM.

Statement showing the nature and value of declared exports to the United States from the Birmingham consular district during the quarter ended September 30, 1882.

Anvils and vises	$31,134 08
Buttons, shell, &c	77,523 06
Boot materials	5,805 84
Chains, hoes, hooks, and scythes	11,066 24
Chemicals and phosphorus	44,844 19
Fancy goods and jewelry	101,386 90
Glass, porcelain, &c	54,289 48
Guns and materials	378,975 95
Hardware, cutlery, steel, and iron	308,426 24
Metal for sheathing	42,675 31
Nickel and cobalt	15,169 85
Pens and tips	37,926 09
Saddlery and skins	39,449 25
Sundries	4,194 94
Total for Birmingham	1,152,867 42

REDDITCH AGENCY.

Needles, fish-hooks, &c	90,820 92

KIDDERMINSTER AGENCY.

Chamois skins, &c	92,715 40
Carpets and rugs	56,842 69
China and glassware	27,253 98
Linen yarn	7,508 46
Sauce	4,425 47
Sundries	3,182 30
Total for Kidderminster	191,928 30

WOLVERHAMPTON AGENCY.

Cotton ties	$22,134 00
Chemicals	7,781 78
Hardware	3,649 77
Iron	51,943 38
Machinery, &c	1,117 83
Tiles	3,931 38
Total for Wolverhampton	90,558 14
Total for Birmingham district	1,526,174 78
Total for corresponding quarter, 1881	1,335,885 50
Increase	190,289 28

WILSON KING,
Consul.

CONSULATE OF THE UNITED STATES OF AMERICA,
Birmingham, September 30, 1882.

EXPORTS FROM BRADFORD.

REPORT BY CONSUL GRINNELL.

I have the honor to transmit a statement showing the exports to the United States from this consular district for each of the four quarters of the year ending September 30, 1882, with a comparison of the total with those of the same periods of 1881. This shows an increase in 1882 of nearly 20 per cent., but as it is in no sense—unless as an indication that our own country is more prosperous—a subject of congratulation, I need not just now refer to it more particularly.

Further reference, however, to the more marked changes in the tables may be had, with the view of calling our manufacturers' attention to the rapidly increasing quantities of certain goods sent forward, which, protected for them to the extent of 70 to 90 per cent., yet remain substantially a monopoly of the Bradford district.

1. In the item of Bradford "stuffs," of which it may be said nearly the whole amount consists of Italian cloths, mohair diagonals, and other linings for men's garments, there was shipped the value of—

In 1882	$6,257,743 72
In 1881	5,099,025 83
Increase present year	1,158,717 89

2. In 54–56-inch worsted coatings there was shipped the value of—

In 1882	$432,054 34
In 1881	111,179 75
Increase present year	320,874 59

On the other hand, there was a decline in the shipments of wool in 1882 of value $343,928.22, and of machinery, $101,983.19.

The harvest has been better throughout England this year than for several years; there is a better feeling prevailing throughout the district with staplers, with spinners, with weavers, and commission houses than for some time past; there is less feverishness, less excitement in business; profits are not so large as formerly, but the business is of that real

and steady character which promises a healthy continued demand, with a legitimate profit. This is felt to be the case especially with those doing an American trade.

The raw material is very firm, and gradually better prices are approached and gained. The spinners complain of rates, but this they always do on a guide marked for the raw material and when the gains have not responded to the advance immediately, while manufacturers of plain goods for the United States are quite content with the continued receipt of moderate orders.

WILLIAM F. GRINNELL,
Consul.

UNITED STATES CONSULATE,
Bradford, October 12, 1882.

BRADFORD.

Statement showing the value of declared exports from the consular district of Bradford to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Totals.
Books	$226 14				$226 14
Buttons	27 09			$968 94	996 03
Carpets	48,789 62	$55,015 08	$48,860 00	37,469 16	190,133 86
Card clothing	5,401 55	10,586 14	8,131 00	6,898 64	31,017 33
Cotton	2,050 96	212 87	1,272 51	1,801 51	5,337 85
Cotton and silk			15,181 77		15,181 77
Chemicals	7,502 62	7,171 62	7,946 78	7,437 30	30,058 32
Calf hair	2,689 87	71 12		1,085 16	3,846 15
Clogs	161 10				161 10
Dogs	41 50				41 50
Electric lamps				6,083 12	6,083 12
Hair cloth				10,296 65	10,296 65
Iron and steel	11,298 76	19,915 40	13,007 56	11,481 75	55,703 47
Leather	3,432 17	6,151 96	3,764 29	2,176 25	15,524 67
Linen	305 26				305 26
Machinery	41,764 32	36,927 16	22,068 50	27,640 70	128,400 68
Miscellaneous	8 81	93 06	329 44	15 62	446 93
Mohair and goat's hair		3,680 90	6,847 46	14,607 95	25,136 31
Mohair and cotton	15,626 20	1,116 14	12,064 07	7,749 44	36,555 85
Noils	3,420 10	11,058 75	3,735 36	21,248 65	39,462 86
Paper		1,356 87			1,356 87
Printed papers				1,445 06	1,445 06
Reeds and healds	285 50		262 36		547 86
Shawls	6,641 38	9,381 96	10,516 36	8,665 33	35,205 03
Stuffs	1,270,054 96	1,694,429 61	1,327,545 66	1,965,713 49	6,257,743 72
Silk	3,816 23	1,500 10	5,086 34	10,689 08	21,091 75
Salted skins			10,209 61	16,610 00	26,819 61
Stone		177 32			177 32
Tapestry damasks				7,927 52	7,927 52
Velvets	21,214 12	14,180 51			35,394 63
Wool	371,895 64	76,406 09	28,176 14	38,529 54	515,007 41
Wool and cotton			251 65		351 65
Woolens	42,329 20	46,929 18	33,434 81	46,730 02	159,423 21
Worstead coatings	82,324 08	78,039 16	94,102 29	177,588 81	432,054 34
Waste	27,120 89	23,386 67	46,545 77	63,023 19	160,076 52
Yarns	41,735 10	39,637 65	29,195 57	25,631 53	136,199 85
Totals	2,010,163 17	2,137,425 32	1,728,535 30	2,509,514 41	8,385,638 20
Same periods, 1881	1,083,233 95	2,518,763 49	1,349,822 25	2,140,574 49	7,091,394 18
Increase					1,294,244 02

BRISTOL.

REPORT BY CONSUL LATHROP.

A glance at the report herewith shows a marked increase during the year past in the value of exportations to the United States from the port of Bristol, an increase all the more noticeable for the reason that for eight years past each succeeding annual report has footed up less than its predecessor.

The excess amounts to $28,325.67, just 20 per cent. advance over the exportation of the previous year. The staple articles of export show a much larger percentage of increase than this. The item of chemicals, the largest single item, shows an increase of ,120 per cent. Nearly 40 per cent. more of prepared chocolate has been exported; a considerable quantity of glue is shipped for the first time; 80 per cent. more of bath bricks than before; and so on, through the list.

I cannot, however, regard such a showing as an evidence of a general revival of business activity. The glory of Bristol has been taken by her far younger and far more enterprising rival on the north, Liverpool. Only radical means, such as her inhabitants are unlikely to adopt, will bring back some of her old pre-eminence.

Declared exports from the consular district of Bristol to the United States during the four quarters of the year ending September 30, 1882; also comparative statement for years ending September 30, 1881, and September 30, 1882.

	Quarter ending Dec. 31, 1881.	Quarter ending March 31, 1882.	Quarter ending June 30, 1882.	Quarter ending Sept. 30, 1882.	Total for the year.	Total for the previous year.	Increase or decrease.
Books	$2,420 15	$2,432 52	$2,414 15	$2,524 81	$9,791 63	$12,637 12	−$2,845 49
Bricks	1,792 67	2,174 28		4,404 54	8,371 44	4,579 99	+ 3,791 45
Carpets		504 71	154 75	840 08	1,499 54		+ 1,499 54
Cattle	152 77		1,169 96		1,322 73	5,922 96	− 4,600 23
Cheese	206 12	104 47			310 59	1,021 21	− 710 62
Chemicals	14,018 19	11,670 21	13,869 34	14,515 28	54,073 75	24,666 80	+29,406 95
Chocolate	6,524 32	1,861 80	4,833 04	2,236 28	15,455 44	11,120 64	+ 4,334 80
Clay	448 62				448 62	1,037 75	− 589 13
Cloth	6,347 00	4,254 82		2,069 00	12,670 82	10,292 40	+ 2,378 42
Earthenware			48 66		48 66		+ 48 66
Floor cloth				1,523 29	1,523 29		+ 1,523 29
Glue			2,162 00	4,104 28	6,266 28		+ 6,266 28
Hats			124 70		124 70		+ 124 70
Iron, manufactured	292 06	94 08	128 96		515 10	7,559 19	− 7,044 09
Iron ore			164 55		164 55		+ 164 55
Leather						2,416 24	− 2,416 24
Machinery	113 97				113 97	532 25	− 418 28
Mineral water			80 30	90 64	170 94		+ 170 94
Nets and twines	768 80	1,149 80	1,932 40	1,727 65	5,578 68	8,660 27	− 3,081 59
Oil cloth			489 08		489 08	6,415 97	− 5,926 89
Paintings						1,146 12	− 1,146 12
Paper stock	1,590 34	6,857 42		3,757 00	12,204 76	4,106 32	+ 8,098 44
Personal effects		2,043 93			2,043 93		+ 2,043 93
Plate glass		2,070 57			2,070 57		+ 2,070 57
Potatoes		5,806 79			5,806 79		+ 5,806 79
Salt						3,603 60	− 3,603 60
Sausage casings	783 69	602 14	194 66	488 83	2,069 32	1,585 36	+ 483 96
Scrap iron				6,649 34	6,649 34		+ 6,649 34
Sheep		29 19		4,233 85	4,263 04		+ 4,263 04
Skins and hides						19,347 00	−19,347 00
Stoneware	68 74			279 77	348 51		+ 348 51
Tin-plates			9,248 15	2,659 78	11,907 93		+11,907 93
Miscellaneous						11,327 14	−11,327 14
Total	35,528 17	41,656 71	37,014 70	52,104 42	166,304 00	137,978 33	+91,082 09
Total previous year	43,175 06	33,051 98	29,956 49	31,794 80	137,978 33		
Increase		8,604 73	7,058 21	20,309 62	28,325 67		
Decrease	7,646 89						−62,756 42
Net increase							+28,325 67

LORIN A. LATHROP, *Consul.*

CARDIFF.

Statement showing the value of declared exports from the consular district of Cardiff to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Rails	$374,815 34	$138,122 98	$234,018 26	$221,931 30	$968,887 88
Blooms	41,937 96	26,712 68	43,826 69	84,090 62	196,567 95
Bricks and cement	1,573 87	4,617 81	6,711 32	14,005 80	26,908 80
Shelling stones	116 64				116 64
Potatoes	110 52	2,162 70			2,273 22
Tin and terne plates	154,282 18	141,455 22	176,751 13	234,498 24	706,986 77
Homo rods	53,931 17	48,048 50	22,003 48	41,822 24	165,805 39
Salt	4,703 20			3,878 94	8,582 14
Iron plates	1,219 49				1,219 49
Black taggers	2,235 60		6,308 54	6,955 95	15,500 09
Nails	551 12			582 64	1,133 76
Steam coals	1,909 34	10,589 28	13,964 08	18,618 38	45,141 08
Fern waiters	1,137 24				1,137 24
Steel plates	487 62		763 42		1,251 04
Sheep-skins	9,974 18	9,576 86		1,544 45	21,095 49
Rotten stone	1,115 30	466 62	314 98	1,098 02	2,994 92
Indigo auxiliary	881 86	470 34	459 75	308 38	2,120 33
Dandelion coffee	151 60				151 60
Scrap iron		17,690 40		8,396 55	26,086 95
Fish plates		5,616 12			5,616 12
Crank shaft one		923 40			923 40
Jersey cows six		1,701 00			1,701 00
South Down ewes fifty-seven		1,603 80			1,603 80
Rams three		194 40			194 40
Steel crops		24,975 49	15,867 94	4,100 62	44,944 05
Sheet iron		6,423 38		6,964 94	13,388 32
Bolts, nuts, and spikes		865 68	5,184 91	3,596 40	9,646 99
Arsenic		1,091 63	619 83	864 20	2,575 66
Zinc cake		200 66		658 21	858 87
Steel shoes and dies		3,843 73	826 26		4,669 99
Cobalt		1,603 80	1,652 40		3,256 20
Iron ladles		41 16	272 32	187 45	500 93
Spiegeleisen			29,129 58	28,217 42	57,347 00
Machinery			2,388 20	874 80	3,263 00
Fireworks			1,404 18		1,404 18
Horses			2,138 40		2,138 40
Manganese			5,685 86	14,477 32	20,163 18
Sulphate of soda				46 57	46 57
Coke				564 00	564 00
Total in U. S. gold	651,194 23	448,997 64	570,291 53	698,283 44	2,368,766 84
Total for preceding year	534,511 23	355,072 60	809,438 47	449,538 26	2,148,560 56
Increase	116,683 00	93,925 04		248,745 18	220,206 28
Decrease			239,146 94		

WIRT SYKES.
Consul.

CORK.

Statement showing the value of declared exports from the consular district of Cork to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Sausage casings	$866 83	.....	.....	$410 61	$1,277 44
Whisky	9,065 22	$1,510 81	$250 73	3,594 29	14,421 05
Feathers	21,491 93	4,866 50	2,433 00	9,976 32	38,767 75
Hides	14,161 51	2,481 17	28,250 27	10,326 71	55,219 66
Butter	155 73	215 49	.....	.....	371 22
Miscellaneous goods (a legacy)	116 90	.....	.....	.....	116 90
Goat-skins	3,893 20	.....	.....	.....	3,893 20
Bacon wrappers	299 71	1,674 83	1,555 73	.....	3,530 27
Potatoes	.....	185 33	.....	.....	185 33
Sundry personal goods	.....	263 02	.....	.....	263 02
Calf-skins	.....	1,703 27	1,056 03	1,630 52	4,389 82
Horses	.....	.....	875 98	583 98	1,459 96
Oil painting (American artist)	.....	.....	.....	500 00	500 00
Kips	.....	.....	.....	121 66	121 66
Total in U. S. gold	50,051 03	12,900 42	34,421 74	27,144 09	124,517 28
Total for preceding year	36,473 76	46,702 55	54,675 88	41,402 83	179,255 02
Increase	13,577 27	.....	.....	.....	13,577 27
Decrease	.....	33,802 13	20,254 14	14,258 74	68,315 01
Net decrease for 1882	.....	.....	.....	.....	54,737 74

JOHN J. PIATT,
Consul.

DUBLIN.

Statement showing the value of declared exports from the consular district of Dublin to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Ale and porter	$141,264 90	$114,341 84	$87,456 75	$118,071 00	$461,134 49
Aerated waters	5,175 56	14,367 00	13,693 72	7,787 00	41,023 28
Books	.....	240 10	1,084 70	158 25	1,483 05
Glue	12,085 36	7,830 22	8,359 26	8,947 54	37,222 38
Hides	1,060 65	.....	.....	.....	1,060 65
Hosiery	2,908 44	.....	.....	.....	2,908 44
Oatmeal	18,648 44	5,729 54	9,480 44	8,801 42	42,659 84
Poplin	.....	.....	.....	730 68	730 68
Potatoes	5,689 56	31,380 25	775 50	.....	37,845 31
Prune wine	1,430 00	1,866 80	2,042 00	1,900 82	8,239 62
Rags	2,758 70	.....	.....	.....	2,758 70
Salted skins	87,359 00	68,908 75	27,894 74	23,340 10	207,502 59
Sausage casings	3,378 60	6,010 00	2,574 00	4,407 56	16,370 16
Silk waste	.....	.....	11,257 00	4,222 44	15,479 44
Superphosphates	45,991 00	.....	.....	.....	45,991 00
Whiskey	13,380 66	9,498 60	879 00	5,843 36	29,601 62
Wines, foreign	1,874 00	1,322 72	424 50	1,082 00	4,703 22
Miscellaneous	13,491 00	3,011 30	1,290 58	3,474 00	21,266 88
Total, United States gold	356,495 87	264,507 12	167,212 19	188,766 17	976,981 35
Total preceding year	345,375 49	289,142 96	272,340 00	265,895 72	.....
Increase	11,120 38	.....	.....	.....	.....
Decrease	.....	24,635 84	105,127 81	77,129 55	195,772 82

B. H. BARROWS,
Consul.

DUNDEE.

Statement showing the value of declared exports from the consular district of Dundee, Scotland, to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year in United States gold.	Total for the previous year.	Increase.	Decrease.
Burlaps	$972,036 93	$737,348 44	$768,713 51	$873,265 08	$3,351,303 96	$3,725,100 81		$373,736 85
Linens	526,629 67	755,508 97	431,077 75	737,058 24	2,450,274 63	2,171,872 06	$278,402 57	
Yarn	159,356 02	153,652 72	160,235 95	133,953 50	607,198 19	295,391 74	311,806 45	
Paper stock	68,456 38	51,109 57	55,341 52	49,836 17	224,743 64	208,322 38	16,421 26	
Paddling	32,165 20	22,204 39	33,932 50	2,881 08	91,183 26	183,050 03		91,866 77
Bagging	6,965 01	5,210 29	19,045 54	38,592 35	69,813 19	52,652 68	17,160 51	
Hemp	40,858 31	8,455 13	11,616 27	16,516 28	77,445 99	24,752 99	52,693 00	
Gauge glasses	3,066 69	2,513 59	1,202 43	1,824 25	8,606 96	7,207 81	1,399 15	
Flax	13,215 68	3,632 10	8,383 48	47,833 75	73,065 01	97,844 72		24,779 71
Carpets	2,848 86	1,944 28	1,483 58	2,159 57	8,436 29	16,399 60		7,963 31
Canvas	14,912 40	11,218 58	18,833 71	947 95	45,912 64	60,805 92		14,893 28
Bags	12,293 05	14,970 73	20,489 38	2,056 30	55,809 46	128,252 39		72,442 93
Tow	12,834 05	240 93		1,368 78	14,443 76	34,896 83		20,453 07
Tarpaulin	1,742 92		2,272 54		4,015 46	8,286 70		4,271 24
Black canvas	318 33				318 33	441 66		123 33
Matting	298 91			139 09	438 00	472 83		34 83
Old furniture	83 24				83 24		83 24	
Machinery	1,275 93				1,275 93	6,721 81		5,445 88
Sail duck	4,105 97	837 37	7,209 74	1,179 59	13,332 67	7,908 40	5,424 27	
Potatoes	2,449 63	362,526 83	95,804 40	143 19	460,924 05		460,924 05	
Old iron rails	2,278 86		1,893 79		4,172 65	2,689 71	1,482 94	
Whisky	291 36	199 49		203 26	694 11	102 38	591 73	
Books on chess, draughts, and other games	235 87				235 87		235 87	
Towels		1,047 10	3,148 26	2,750 48	6,945 84	30,565 37		23,619 53
Scrim		1,817 38	647 31	439 00	2,903 69	2,898 68	5 01	
Stoneware whorls		17 86			17 86		17 86	
Wove corsets		252 31			252 31		252 31	
Jute press cloth		601 03		462 60	1,063 63		1,063 63	
Plants		418 34			418 34	386 61	31 73	
Double banding		297 19			297 19		297 19	
Antique furniture		222 40			222 40		222 40	
Jute twine			224 69	618 47	843 16	709 80	133 36	
Horse blanketing			4,710 28	4,672 48	9,382 76	301 99	9,080 77	
Parceling			822 48		822 48		822 48	
Second-hand bags			243 35		243 35		243 35	

Market or school bags			1,221 70	7,668 57	8,760 27	1,309 20	7,450 98	
Wool bags			2,357 45		2,357 45		2,357 45	
Handkerchiefs			166 45		166 45		166 45	
Cotton banding			177 93		177 93		177 93	
Salt sacking			94 21		94 21		94 21	
Picking bands			120 07		120 07		120 07	
Tarred oakum			868 08	868 09	1,736 17	226 87	1,509 30	
Personal effects			121 67		121 67	70 85	50 82	
Second-hand machinery				1,552 69	1,552 69	3,427 77		1,875 08
Cropping machines				684 84	684 84		684 84	
Soda-water machine				75 54	75 54		75 54	
Cargo mats				1,034 24	1,034 24		1,034 24	
Second-hand steam-loom				52 93	52 93		52 93	
Books				24 33	24 33		24 33	
Polished granite				199 55	199 55		190 55	
Napkins						1,404 74		1,404 74
Steel rails						97,219 53		97,219 53
Jute cord						532 06		532 06
Lantern slides						93 92		93 92
Flax seed						76 80		76 80
Meal bagging						665 37		665 37
Steel fish plates						1,136 39		1,136 39
Second-hand card pins						127 35		127 35
Wearing apparel						162 95		162 95
Loom furnishings						568 50		568 50
Sewing machines						97 21		97 21
Coals						2,557 58		2,557 58
Hackle machinery						319 77		319 77
Lap robes						6,304 39		6,304 39
Comfit pans and frames						2,624 78		2,624 78
Jute carpet bags						1,642 33		1,642 33
Oleomargarine						39 90		39 90
Cement						174 62		174 62
Total for 1882	1,878,719 36	2,136,247 02	1,658,460 02	1,930,932 24	7,604,358 64	7,188,818 87	1,172,793 77	757,254 00
Total for 1881	1,490,860 12	2,005,936 51	1,546,442 05	1,145,580 19	7,188,818 87			
Increase for 1882	387,859 24	130,310 51	112,017 97		415,539 77			
Decrease for 1882				214,647 95				
Net increase for 1882							415,539 77	

UNITED STATES CONSULAR AGENCY, ABERDEEN (A DEPENDENCY OF DUNDEE).

Polished granite	12,839 11	16,402 26	20,896 58	26,896 77	76,534 72	69,722 03	6,812 69	
Linen and jute manufactures	15,621 91	18,020 09	18,388 15	20,781 22	72,811 37	68,558 63	4,252 74	
Woolen manufactures	10,036 90	9,724 45	80,874 44	88,231 43	88,367 22	34,278 67	54,088 55	
Paper manufactures	5,282 70	2,611 54	3,876 06	3,161 28	14,931 58	16,822 50		1,890 92
Horses			729 09	3,543 42	4,272 51		4,272 51	

Statement showing the value of declared exports from the consular district of Dundee, Scotland, to the United States, &c.—Continued.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year in United States gold.	Total for the previous year.	Increase.	Decrease.
Cattle				$1,990 43	$1,990 43		$1,990 43	
Clothes				58 32	58 32		58 32	
Silver plate				93 99	93 99		93 99	
Photographic goods				786 26	786 26	$620 32	165 94	
Whisky		$147 03		120 44	267 47	2,144 53		$1,877 06
Canvas sails	$325 84				325 84		325 84	
Potatoes		26,805 67	$612 44		27,418 11		27,418 11	
Trees and shrubs		143 87			143 87		143 87	
Twine		72 90			72 90		72 90	
Harness blacking			493 59		493 59		493 50	
Books						224 28		224 28
Total for 1882	44,106 46	73,927 81	74,870 35	95,663 56	288,568 18	192,370 96	100,189 48	3,992 26
Total for 1881	45,067 54	36,491 65	25,173 99	85,637 78	192,370 96			
Increase for 1882		37,436 16	49,696 36	10,025 78	96,197 22			
Decrease for 1882	961 08							
Net increase for 1882							96,197 22	

ABSTRACT.

Total at Dundee for 1882	1,878,719 36	2,136,247 02	1,658,460 02	1,930,932 24	7,604,358 64	7,188,818 87	415,539 77	
Total at Aberdeen for 1882	44,106 46	73,927 81	74,870 35	95,663 56	288,568 18	192,370 96	96,197 22	
Total from this consular district for 1882	1,922,825 82	2,210,174 83	1,733,330 37	2,026,595 80	7,892,926 82	7,381,189 83	511,736 99	
Total from this consular district for 1881	1,535,927 66	2,042,428 16	1,571,616 04	2,231,217 97	7,381,189 83			
Increase for 1882	386,898 16	167,746 67	161,714 33		511,736 99			
Decrease for 1882				204,622 17				
Nett increase for 1882							511,736 99	

WILLIARD B WELLS *Consul*

DUNFERMLINE.

Statement showing the value of declared exports from the commercial agency district of Dunfermline, Scotland, to the United States, during the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total in U. S. gold.
Linen goods	$404,032 49	$523,296 12	$319,004 73	$550,904 44	$1,797,237 78
Cotton goods	109,623 17	134,492 88	94,012 99	123,075 60	461,204 64
Floor oil cloths	21,814 99	42,379 00	22,696 23	43,422 27	130,312 49
Miscellaneous			5,735 24	10,045 48	15,780 72
Total for the year 1882	535,470 65	700,168 00	441,449 19	727,447 79	2,404,535 63
Total for the year 1881	352,949 71	591,334 99	282,374 20	662,627 55	1,889,286 45
Increase	182,520 94	108,833 01	159,074 99	64,820 24	515,249 18
Decrease					

H. RAY MYERS,
Commercial-Agent.

FALMOUTH.

Statement showing the value of the declared exports to the United States from this consular district during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Arsenic	$14,632 01	$15,403 20	$2,468 42		$32,503 63
China clay	13,354 95	36,780 87	11,991 40	$13,065 77	75,192 99
Model of a mine			102 19		102 19
Ground Cornwall stone				214 72	214 72
Total in United States gold	27,986 96	52,184 07	14,562 01	13,280 49	108,013 53
Total for preceding year	21,965 21	17,695 75	13,622 80	23,234 03	76,517 79
Increase	6,021 75	34,488 32	939 21		31,495 74
Decrease				9,953 54	

IMPORTS.

The following cargoes have been discharged in Falmouth waters from ports in the United States during the year ending September 30, 1882:

Names of vessels.	Register tonnage.	Where from.	Cargo.
Augusta	382	New York	Wheat.
Maria D.	372	Baltimore	Do.
James A. Mark	346	Bull River	Phosphate.
Gaetano Repetto	573	New York	Maize.
Lesseps	637	do	Wheat.
Rereward	768	Pensacola	Timber.
F. Danovaro	545	New York	Maize.
America	692	do	Wheat and maize.
J. C. Munro	612	Portland, Oreg	Wheat.
Giovanni M	488	Philadelphia	Do.
Echo	369	Charleston	Phosphate.
	5,784		

HOWARD FOX,
Consul.

GLASGOW.

Statement showing the value of declared exports from the consular district of Glasgow to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Thread	$549,992 80	$531,572 80	$534,666 84	$417,763 80	$2,033,996 24
Cotton and linen goods	445,340 40	594,465 07	260,616 25	301,221 35	1,601,643 07
Woolen goods	98,478 00	25,925 54	72,239 75	110,526 50	307,169 79
Muslins	72,466 40	181,588 90	82,814 79	97,600 85	434,470 94
Laces and trimmings	63,182 14	130,617 24	84,996 16	181,546 54	460,342 08
Carpets	58,519 00	34,976 90	40,015 72	87,467 30	220,978 92
Hats and caps	47,308 26	20,824 50	65,148 68	51,656 65	184,938 09
Furs and skins	20,522 06	12,023 50	6,815 80	12,281 60	51,642 96
Fishing gut	6,120 40	7,560 00	6,911 88	780 00	21,374 28
Hemp and jute goods	.....	402 32	213 48	.....	615 80
Books	2,915 40	3,250 50	643 56	1,099 52	7,908 98
Pig iron	351,837 00	399,493 50	327,480 52	524,417 30	1,603,228 32
Machinery and iron ware	345,179 40	126,466 30	118,451 00	69,405 18	659,501 88
Wire goods	6,768 40	5,761 18	3,073 90	13,482 50	30,085 98
Gum and paints	21,286 18	10,251 50	17,559 14	15,839 20	64,936 02
Coals	6,796 52	13,050 25	13,048 68	5,086 50	38,581 95
Paper	31,783 82	27,975 58	33,806 22	21,529 50	115,095 12
Granite and stone goods	6,700 26	2,892 18	6,896 36	4,675 00	21,163 80
Wines and liquors	43,772 40	3,235 85	7,538 76	2,637 80	57,184 81
Beer	11,709 68	7,077 50	5,978 98	6,179 30	30,945 46
Scrap iron and steel	37,257 00	39,874 60	36,742 58	21,209 32	135,083 50
Tobacco pipes (clay)	10,839 06	5,573 00	3,512 68	5,172 18	25,096 92
Shawls	32,276 36	39,185 56	26,475 78	89,841 90	187,779 60
Fire clay goods	6,021 34	1,159 40	6,304 30	6,391 72	19,876 76
Chemicals	148,940 04	139,355 64	160,080 38	95,122 10	543,498 16
Glass and earthenware	25,098 68	9,218 07	27,320 56	11,637 20	73,274 51
Potatoes	.....	566,423 06	104,132 94	1,373 90	671,929 90
Horses	.....	.....	.....	232,985 00	232,985 00
Miscellaneous	87,004 74	77,116 20	124,663 40	95,021 82	384,406 16
Total in United States gold	2,539,697 74	3,017,317 24	2,178,749 09	2,483,951 53	10,219,715 60
Total for preceding year	1,792,905 22	3,692,431 99	1,668,836 43	2,569,060 06	9,723,231 70
Increase	746,794 52	.....	509,912 66	.....	496,483 90
Decrease	.....	675,114 75	.....	85,108 53	.....

BRET HARTE,
Consul.

LEEDS.

Statement showing the value of declared exports from the consular district of Leeds to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Ale finings	.....	.....	.....	$42 88	$42 88
Almanacs	.....	.....	$450 36	4,592 08	5,042 44
Bricks	$262 40	$4,324 66	1,185 88	7,309 98	13,082 92
Bundles, bars of iron, and steel tires	7,364 00	5,902 14	2,916 64	5,583 40	21,766 18
Burners, &c	669 08	917 44	1,127 42	901 40	3,615 34
Boot protectors	.....	.....	303 64	.....	303 64
Brushes	.....	.....	106 82	.....	106 82
Card clothing	2,276 34	.....	970 45	1,327 04	4,573 83
Carpet, wool, and cattle hair	.....	17,459 34	19,045 74	4,695 66	41,200 74

Statement showing the value of declared exports, &c.—Continued.

Articles.	Quarter ending— December 31, 1881.	March 31, 1881.	June 30, 1882.	September 30, 1882.	Total for the year.
Carpeting	$141 52				$141 52
Chemicals	40,062 07	$29,550 03	$35,317 90	$54,853 41	159,783 41
Cloths (union)	1,624 08	2,590 12	1,388 84	1,743 76	7,346 80
Castings			250 96		250 96
Cottons	14,480 54	12,146 37	7,521 14	5,930 80	40,078 85
Cottons and mohair	59,065 89	21,310 50		114,313 75	194,690 14
Cottons and silk	3,027 41		6,354 91	27,345 64	36,727 96
Cottons, mohair, and silk	3,604 25		2,406 60	4,925 33	10,936 18
Cottons and worsted	2,395 93	918 91			3,314 84
Chinese goods		442 25	2,899 37		3,341 62
Down clothing	2,295 44			1,350 84	3,646 28
Dress goods				417 80	417 80
Economizers	6,559 56	11,830 00	5,590 00	10,691 44	34,671 00
Earthenware	75 02		1,900 00	2,876 62	4,852 54
Engines (locomotive)			14,850 00		14,850 00
Fustians and woolens	5,625 70	7,666 91	8,729 91	10,251 68	32,274 20
Glue and pitch	624 08	1,146 92	591 00	2,005 72	4,367 72
Grease	1,022 08	1,571 10	1,792 94	9,302 36	13,688 48
Grindstones and whitestone				1,232 90	1,232 90
Hair goods	33,857 99	16,548 64	31,809 81	80,107 51	162,323 95
Household goods	334 20				334 20
Hardware			100 00	376 20	476 20
Hardner sheet			220 72		220 72
Ironwork	170 36			4,207 80	4,378 16
Instruments (astronomical)		192 04			192 04
Lamps	188 84				188 84
Leather	19,519 66	16,183 96	17,751 00	17,399 72	70,854 34
Linens	14,627 06	9,731 17	6,191 34	12,171 62	42,721 19
Linens and cotton	9,116 79	6,957 08			16,073 87
Machinery	76,943 92	67,803 79	73,130 47	46,421 34	264,299 52
Mohair	682 70	10,095 39	71,481 19	3,324 32	85,583 60
Mohair and cotton			46,886 11		46,886 11
Oil (sod)			1,461 50		1,461 50
Pins	180 48	331 70	282 28		794 46
Pans (steam)			240 00		240 00
Paper hangings			196 92	483 56	680 48
Pipes			70 48		
Rags	990 16	500 00	280 72		1,770 88
Rags and clock	600 38				600 38
Skins	11,362 98	23,947 52	19,533 64	14,593 26	69,437 40
Steel wheels, &c	761 08		100 24	4,126 68	4,988 00
Stones	104 02				104 02
Show cards				227 64	227 64
Steam plowing duplicates				280 00	280 00
Shawls	1,375 91	6,241 36	2,796 29	12,388 78	22,802 34
Silks	900 68	261 60		38,442 31	39,604 59
Sundries	833 28	1,086 49	730 42	715 12	3,365 31
Threads	43,361 83	70,544 30	19,620 45	20,989 00	154,515 28
Threads and yarn			40,586 82	47,691 42	88,278 24
Twines	3,529 72	3,516 54	475 52	710 36	8,232 64
Tools, &c			9,689 04	297 90	9,986 94
Tissue (waterproof)		506 12	1,020 37	515 25	2,041 74
Waste	5,107 82	8,106 62	961 92	1,034 20	15,210 56
Wire		132 18			132 18
Wagons				100 72	100 72
Woolens	301,448 66	593,575 61	431,363 46	682,852 73	2,009,240 46
Woolens and worsteds	27,216 87	72,958 77	22,502 72		122,678 36
Woolens and cotton	5,375 39	11,219 60	12,494 98	22,181 31	51,271 28
Woolens and silk	2,395 66	4,005 25	2,251 93	1,106 58	9,759 42
Woolens, cotton, and silk			343 75		343 75
Worsteds	84,411 86	213,610 56	112,090 96	247,001 20	657,114 58
Yarn	53,024 48	40,765 46	23,121 13	33,211 44	150,122 51
Total in United States gold	849,597 87	1,296,598 44	1,065,487 60	1,564,652 96	4,776,336 87
Total for preceding year	356,063 32	908,952 28	552,425 99	1,022,359 48	2,839,801 07
Increase	493,534 55	387,646 16	513,061 61	542,293 48	1,936,535 80

A. V. DOCKERY,
Consul.

LIVERPOOL.

Statement showing the value of declared exports from the consular district of Liverpool to the United States during the four quarters of the year ending September 30, 1882. Also a comparative statement of the total exports for the years ending September, 1881–1882.

Articles.	Quarter ending—				Total for the year.	Total for the previous year.	Increase.	Decrease.
	December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.				
Beer	$32,118 89	$25,524 79	$33,058 12	$33,056 58	$123,758 38	$86,818 36	$36,940 02	
Chemicals	1,290,221 07	1,104,758 75	1,253,605 53	1,411,108 10	5,059,693 45	4,793,726 38	265,967 07	
Coal	219,897 66	55,093 64	125,132 31	167,022 50	567,146 11	910,127 98		$342,981 87
Dry goods	14,891 48	25,490 71	10,847 41	12,360 91	63,590 51	31,442 46	32,148 05	
Earthenware and glass	201,745 60	205,872 41	236,541 08	235,205 02	879,364 11	676,394 63	202,969 48	
Fruit and vegetables	630,080 35	378,579 63	155,572 26	163,994 78	1,328,227 02	574,066 44	754,160 58	
Machinery	11,877 86	14,794 16	5,956 59	7,786 40	39,915 01	51,838 05		11,923 04
Hemp and flax	25,471 25	14,302 64	4,452 85	15,421 04	59,647 78	191,710 92		132,063 14
India rubber	641,171 10	424,845 43	787,375 37	160,665 64	2,014,057 54	859,506 11	1,154,551 43	
Iron	479,209 11	440,466 91	185,545 05	266,537 30	1,371,758 37	781,331 18	590,427 19	
Jute bags and canvas	34,170 36	65,269 48	21,704 58	41,140 44	162,284 86	370,855 96		208,571 10
Leather and skins	510,018 92	336,051 28	375,085 18	449,245 43	1,670,401 11	1,987,810 74		317,409 63
Rags and waste paper	209,376 28	182,785 73	192,601 47	181,440 43	766,203 91	722,671 99	43,531 92	
Salt	288,349 85	348,115 33	244,634 09	305,433 58	1,186,532 85	1,387,307 77		200,774 92
Slates and tiles	12,375 50	16,210 31	20,045 10	12,545 83	61,176 74	42,727 87	18,448 87	
Steel and steel wire	483,934 48	629,506 10	407,549 91	468,822 70	1,989,813 19	1,307,769 69	682,043 50	
Tin plates	2,278,865 14	2,131,030 61	2,098,381 28	2,498,990 55	9,007,267 58	7,940,576 59	1,066,690 99	
Tin	23,539 26	48,124 81	44,538 19	114,701 65	230,903 91	160,219 79	70,684 12	
Wire rope	21,923 58	21,383 39	24,833 74	29,708 63	97,849 34	70,661 57	27,187 77	
Wool	557,603 55	484,562 27	618,478 61	511,136 97	2,171,781 40	1,875,519 93	296,261 47	
Wood	32,649 34	31,828 90	33,335 52	21,216 86	119,028 62	188,664 47		69,635 85
Pig iron	278,680 11	558,129 15	618,226 98	878,391 91	2,333,428 15	1,580,248 72	753,179 43	
Cement	25,340 59	19,830 98	43,394 58	39,489 65	128,064 80	68,053 26	60,011 54	
Yellow metal	33,705 37	25,247 40	36,498 75	30,716 24	126,167 76	119,988 28	6,179 48	
Grease and oil	56,115 60	92,468 37	68,139 00	25,718 50	242,441 47	33,900 02	208,541 45	
Private effects	13,635 92	17,743 26	13,957 12	26,024 24	71,360 54	54,257 85	17,102 69	
Paint and varnish	5,163 35	5,684 07	5,693 80	3,752 07	20,293 29	13,908 56	6,384 73	
Wine and spirits	9,805 99	10,528 24	7,148 83	7,363 01	34,844 07	17,091 15	17,752 92	
Cotton	69,527 68	64,408 12	73,712 86	131,827 76	339,476 42	214,229 18	125,247 24	
Granite	2,783 62	2,296 99	3,815 33	2,136 89	11,032 83	7,713 40	3,318 93	
Hardware	121,767 18	148,209 24	74,580 43	251,319 43	597,026 28	843,130 88		246,104 60
Rice	98,950 53	88,093 37	531,548 31	172,660 96	891,253 17	305,855 77	585,397 40	
Provisions	35,282 12	33,354 98	20,341 97	50,756 64	139,735 71	39,793 37	99,942 34	
Hair	14,180 97	16,424 44	30,683 27	27,041 88	88,330 56	67,269 13	21,061 43	

Cattle	10,506 76	92,156 91	35,062 47	195,894 45	323,620 59	227,751 09	95,868 90	.....
Iron ore	9,698 93	6,652 50	7,046 69	17,557 18	40,955 30	172,936 12	.....	131,980 82
Books and stationery	3,391 94	2,530 57	2,759 21	2,822 56	11,504 28	12,540 97	.....	1,036 69
Tea and coffee	2,520 84	4,282 51	2,700 90	1,289 62	10,793 87	11,543 33	.....	749 46
Felt	627 78	3,323 82	2,150 99	3,296 22	9,398 81	14,526 51	.....	5,187 70
Manure	61,648 81	61,439 56	.....	25,047 73	148,136 10	130,466 00	17,670 10	.....
Seed and plants	1,167 96	1,474 54	2,910 15	4,409 04	9,961 70	13,975 87	.....	4,014 17
Bell-metal	3,659 61	.....	.....	1,703 28	5,352 89	.....	5,362 89	.....
Dyes	2,837 17	.....	.....	1,421 01	4,258 18	.....	4,258 18	.....
Carbon	491 52	.....	189 79	53 53	734 84	12,156 52	.....	11,421 68
Saddlery	238 46	262 79	.....	243 33	744 58	1,863 86	.....	1,119 28
Cutlery	67 33	.....	.....	.....	97 33	.....	97 33	.....
Drugs	5,226 61	5,645 13	3,956 46	51,744 25	66,572 45	18,697 09	47,875 36	.....
Grindstones	1,386 94	885 70	146 00	.....	2,418 64	2,550 00	.....	131 36
Barytes	472 05	272 52	467 19	2,055 94	3,267 70	4,769 17	.....	1,501 47
Precious metal	12,886 49	7,090 49	19,227 54	14,612 84	53,817 36	19,835 87	33,981 49	.....
Gum and glue	5,109 82	1,455 08	4,628 03	4,331 19	15,524 12	1,425 89	14,098 23	.....
Feathers	1,610 81	.....	.....	.....	1,610 81	.....	1,610 81	.....
Oatmeal	1,226 35	.....	.....	272 52	1,498 87	871 10	627 77	.....
Brass	10,501 91	218 99	.....	.....	10,720 90	.....	10,720 90	.....
Tar	131 40	58 39	.....	.....	189 79	2,428 38	.....	2,238 59
Mineral water	73 00	194 66	632 64	.....	900 30	5,679 21	.....	4,778 91
Silk waste	715 37	.....	3,513 61	6,594 11	10,823 09	2,725 24	8,097 85	.....
Carriages	1,236 09	.....	5,795 99	666 71	7,698 79	6,521 12	1,177 67	.....
Diamonds and jewelry	5,601 34	.....	102 20	.....	5,703 54	146 00	5,557 54	.....
Tobacco	194 66	.....	.....	111 93	306 59	1,391 82	.....	1,085 23
Mother-of-pearl shells	.....	2,267 78	632 65	661 84	3,562 27	579 11	2,983 16	.....
Elephants' teeth	.....	6,574 64	4,399 32	.....	10,973 96	13,129 82	.....	2,155 86
Lead	.....	7,017 49	.....	.....	7,017 49	.....	7,017 49	.....
Enamel dials	.....	642 38	.....	228 73	871 11	618 05	253 06	.....
Straws	.....	1,212 24	.....	189 79	1,402 03	379 59	1,022 14	.....
Wax	.....	326 05	.....	652 11	978 16	958 70	19 46	.....
Spelter	.....	2,116 92	.....	.....	2,116 92	832 17	1,284 75	.....
Molasses	.....	.....	1,343 15	.....	1,343 15	4,958 96	.....	3,615 81
Ship chandlery	.....	.....	4,754 57	895 44	5,650 01	.....	5,650 01	.....
Chronometer movements	.....	.....	194 66	.....	194 66	851 64	.....	656 98
Fire-arms	.....	.....	311 45	.....	311 45	.....	311 45	.....
Ginger	.....	.....	.....	350 39	350 39	.....	350 39	.....
Wheat	.....	.....	.....	656 98	656 98	.....	656 98	.....
Lines	.....	.....	.....	165 46	165 46	1,163 09	.....	997 63
Baskets	.....	.....	.....	394 19	394 19	.....	394 19	.....
Manganese	.....	.....	.....	175 19	175 19	.....	175 19	.....
Gambier	.....	.....	.....	2,175 33	2,175 33	.....	2,175 33	.....
Scientific instruments	.....	.....	.....	2,092 60	2,092 60	.....	2,092 60	.....
Myrabolams	.....	.....	.....	671 58	671 58	.....	671 58	.....
Sponges	.....	.....	.....	.....	.....	1,391 82	.....	1,391 82
Barrels	.....	.....	.....	.....	.....	29,515 32	.....	29,515 32
Cutch	.....	.....	.....	.....	.....	7,582 01	.....	7,582 01
Mats	.....	.....	.....	.....	.....	340 66	.....	340 66

Articles.	December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.	Total for the previous year.	Increase.	Decrease.
Copper						$14,740 63		$14,740 63
Total in United States gold	$8,908,198 61	$8,275,113 55	$8,499,891 44	$9,098,317 09	$34,781,520 69	29,119,805 55	$7,418,195 14	1,756,480 00
Total for the preceding year	7,258,103 98	6,685,734 28	7,199,138 13	7,976,829 16				
Increase	1,650,094 63	1,589,379 27	1,300,753 31	1,121,487 93				
Decrease								
Net increase							5,661,715 14	

S. B. PACKARD, *Consul.*

LONDON.

Statement showing the value of declared exports from London to the United States for 1881 *and* 1882, *also decrease or increase of value in the articles named.*

	1881.	1882.	Increase.	Decrease.	Percentages of— Increase.	Decrease.
Beer, wines, and spirits	$315,487 04	$539,854 99	$224,367 95		+ 71	
Chemicals, soda, &c	2,665,332 94	2,557,211 01		$108,121 93		+ 4
Books and stationery	1,019,763 31	2,202,643 59	1,182,880 28		+115	
Dry goods	2,751,639 65	4,835,565 97	2,083,926 32		+ 75	
Machinery and hardware	91,115 44	192,993 00	91,877 56		+100	
Iron, steel, &c	17,155,978 62	22,536,040 56	5,380,061 94		+ 31	
Leather, hides, skins, furs, &c	3,932,731 49	4,131,032 05	198,300 56		+ 5	
Rags and paper waste	547,946 51	793,916 20	245,969 69		+ 44	
Wool	371,825 34	239,229 92		132,595 42		−36
Raw silk	186,218 39	63,690 59		122,527 80		−66
Tea	87,525 85	45,898 83		41,627 02		+47
Clothing	68,069 54	52,025 25		16,044 29		+23
Precious stones	2,972,466 90	2,934,801 03		37,665 87		+ 1
Hops	7,157 16	7,771 16	614 00		+ 8	
Seeds	199,273 22	349,791 70	150,518 48		+ 75	
Feathers	1,429,567 18	2,662,488 78	1,232,921 60		+ 86	
Miscellaneous	16,747,874 86	10,105,198 34		6,642,676 52		−40
Total	50,549,973 44	54,240,152 97	10,791,438 38	7,101,258 85	Net + 7	

SUMMARY.

Total for year ending September 30, 1882	$54,240,152 97	Increase in ten articles	$10,791,438 38
Total for year ending September 30, 1881	50,549,973 44	Decrease in seven articles	7,101,258 85
Net total increase	3,690,179 53	Net total increase	3,690,179 58

EDWIN A. MERRITT,
Consul-General.

LONDONDERRY.

Statement showing the value of declared exports from the consular district of Londonderry to the United States during the four quarters ending September 30, 188–.

Articles.	Quarter ending— December 31, 1882.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Whisky	$641 24	$102 19		$254 46	$997 89
Potatoes	5,955 12	132,668 21	$20,393 44	809 77	159,826 54
Old rails		8,349 82			8,349 82
Watches and gold			540 17		540 17
Hides				204 39	204 39
Total in United States gold	6,596 36	141,120 22	20,933 61	1,268 62	169,918 81
Total for preceding year	655 72	248 49	30 66	618 06	1,552 93
Increase	5,940 64	140,871 73	20,902 95	650 56	168,365 88

A. LIVERMORE.

13 FEB

EXPORTS FROM MANCHESTER.

REPORT BY CONSUL SHAW.

The past year, as a whole, has not been as favorable for all classes of Manchester manufacturers as many confidently predicted it would be at the beginning. Competition has been keen in the home market, and prices have ruled low; and the production has more than kept up to the demand.

At the present time considerable despondency exists among cotton manufacturers in the consular district.

Profits are, and for months past have been, very small; and losses are not uncommon in the trade.

I am assured that cotton spinners are finding it exceedingly difficult to secure sales of yarn at prices that will allow any margin of profit.

Trade in this line is worse than it has been since the season of 1879, when a reduction of about 20 per cent. was made on the wages of operatives.

There appears to be an over-production which causes keen competition in disposing of yarn, thus forcing down prices to the lowest possible limit.

The Egyptian war caused great unrest among those who use Egyptian cotton, the fear being that the usual supply could not be secured. This led to large purchases of American cotton, and free purchases forced up the price. At the same time the price of yarn did not equal the increased price paid for cotton, and the uncertainty about the effects of the war, together with the enhanced cost of cotton, combined to make manufacturers a great deal of trouble. The close of the war has been reassuring to this class, but low prices for yarn, as compared with the price of the raw material, make spinners feel the severest pressure in working their mills under present conditions.

Growing competition abroad is the chief source of danger to manufacturers here. Every new mill erected in foreign countries has a direct influence on the demand for English manufactures. This competition is more keenly felt at present than it has been for a long time, and, as home manufactures multiply the difficulty of securing foreign markets for English goods will increase.

There has been a very large export trade in English cotton-manufacturing machinery during the past year, and every machine set up and kept at work outside of England helps supply a demand that otherwise would be likely to reach this market.

The skill of English cotton operatives enables them to work up the raw material with a very small margin of waste, and this apparently small advantage, where every item of cost is cut down to the lowest limit, is of much importance to English manufactures. In fact, in this particular, operatives have become experts in producing from every pound of pure cotton nearly its equivalent in manufactured goods. The loss from waste, after the impurities are removed, is surprisingly small, so perfect is the manipulation of the cotton from the time it leaves the picker until it is turned out of the loom.

ALBERT D. SHAW,
Consul.

UNITED STATES CONSULATE,
Manchester, October 21, 1882.

Statement showing the value of declared exports from the consular district of Manchester to the United States for the four quarters of the year ending September 30, 1882.

Articles.	December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Totals.
Cottons	$1,098,652 89	$1,507,190 64	$989,873 51	$1,278,288 80	$4,874,005 84
Mixed goods	272,542 58	613,596 81	244,727 24	608,279 08	1,739,145 71
Chemicals	285,993 02	199,561 39	193,478 88	249,569 34	928,602 63
Rags and junk	171,968 30	225,199 45	211,433 13	131,139 96	739,740 84
Machinery	326,265 22	300,817 78	302,572 22	387,914 51	1,317,569 73
Worsted stuffs	49,062 50	183,140 02	55,491 28	158,494 18	446,187 98
Leather and hides	50,184 74	45,524 00	71,040 17	42,025 93	208,774 84
Wool	106,807 77	102,919 58	213,991 74	258,474 16	682,193 25
Linens	192,376 17	364,897 08	162,012 96	271,799 70	991,085 91
Hosiery	93,672 11	187,411 16	116,569 64	202,854 08	600,506 99
Carpets	61,403 75	64,710 72	44,292 79	55,206 32	225,613 58
Iron	116,009 89	63,594 95	29,116 58	32,025 81	240,747 23
Silk	94,750 77	137,739 82	141,814 35	186,603 93	560,908 87
Paper	23,629 42	44,816 83	16,775 37	11,726 31	96,947 93
Steel	26,613 10	11,006 12	13,569 48	16,493 48	61,782 18
Rugs, mats, and miscellaneous	143,283 28	97,431 87	121,367 51	81,513 16	443,595 84
Tin				31,966 37	31,966 37
Jute				26,198 33	26,198 33
Seals and furs	8,964 58	12,056 75	84,139 81	21,054 23	126,215 37
Musical instruments	1,598 54	1,505 73	2,191 07	1,430 51	6,725 87
Wine, beer, &c	280 96	544 34	66 87	49 39	941 36
Granite	915 99	4,945 27	6,847 34	7,042 33	19,750 93
Vegetables		6,518 06	3,460 69		9,978 75
Opium		4,220 95			4,220 95
Totals 1882	3,118,975 58	4,179,349 34	3,024,932 43	4,060,149 93	14,383,407 28
Totals 1881	2,388,203 77	3,387,599 17	2,648,835 88	3,773,688 47	12,148,327 29
Increase	730,771 81	791,750 17	376,096 55	286,461 46	2,235,079 99

NEWCASTLE-UPON-TYNE.

Statement showing the value of declared exports from the consular districts of Newcastle upon-Tyne and its agencies, viz: Sunderland, Hartlepool and Middlesbrough, and Carlisle, to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending December 31, 1881.				
	Newcastle-upon-Tyne.	Sunderland.	Hartlepool and Middlesbrough.	Carlisle.	Total for consulate and agencies.
Chemicals	$32,276 92				$32,276 92
Coals	15,000 00	$1,495 51			16,495 51
Cotton				$35,688 05	35,688 05
Furs and skins	36,238 55				36,238 55
Glass	21,390 20	249 55			21,639 75
Grindstones	5,660 08				5,660 08
Gypsum					
Iron and steel	42,539 55		$8,473 79		51,013 34
Linen and thread				3,445 26	3,445 26
Paints	18,937 04				18,937 04
Soda	158,024 53				158,024 53
Miscellaneous	28,493 71		80,325 29	13,754 77	122,563 77
Total	358,560 58	1,745 06	88,799 08	52,878 08	501,982 80
Total for preceding year	315,336 74	1,482 58	213,173 02	36,535 75	566,528 09
Increase	43,223 84	262 48		16,342 33	
Decrease			124,373 94		64,545 29

Statement showing the value of declared exports from the consular districts of Newcastle upon-Tyne, &c.—Continued.

Articles.	Quarter ending March 31, 1882.				
	Newcastle-upon-Tyne.	Sunderland.	Hartlepool and Middlesbrough.	Carlisle.	Total for consulate and agencies.
Chemicals	$41,579 76				$41,579 76
Coals	7,897 84				7,897 84
Cotton				$38,790 20	38,790 20
Furs and skins	46,239 84				46,239 84
Glass	6,780 14	$288 33	$107 06		7,175 53
Grindstones	9,049 90				9,049 90
Gypsum	2,798 58				2,798 58
Iron and steel	34,880 66		30,338 22	31,626 83	96,845 71
Linen and thread				5,794 81	5,794 81
Paints	49,281 12				49,281 12
Soda	94,321 84				94,321 84
Miscellaneous	49,116 42	6,068 28	229,117 38	31,665 29	315,967 37
Total	342,946 10	6,356 61	259,562 66	107,877 13	716,742 50
Total for preceding year	331,832 12	3,020 15	268,202 07	65,373 26	668,427 60
Increase	11,113 98	3,336 46		42,503 87	48,314 90
Decrease			8,639 41		

Articles.	Quarter ending June 30, 1882.				
	Newcastle-upon-Tyne.	Sunderland.	Hartlepool and Middlesbrough.	Carlisle.	Total for consulate and agencies.
Chemicals	$30,453 78				$30,453 78
Coals					
Cotton				$26,789 11	26,789 11
Furs and skins	24,613 54				24,613 54
Glass	12,935 48	$123 79			13,059 27
Grindstones	2,660 92				2,660 92
Gypsum	4,952 62				4,952 62
Iron and steel	81,447 02		$6,388 28	269,388 55	357,223 85
Linen and thread				4,774 28	4,774 28
Paints	19,878 50				19,878 50
Soda	148,090 60				148,090 60
Miscellaneous	47,848 78	79 80	326,031 85	23,250 57	397,210 50
Total	372,881 24	203 59	332,419 63	324,202 51	1,029,706 97
Total for preceding year	327,407 43	809 36	377,018 22	94,521 25	799,756 26
Increase	45,473 81			229,681 26	299,950 61
Decrease		605 77	44,598 59		

Statement showing the value of declared exports from the consular districts of Newcastle-upon-Tyne, &c.—Continued.

Articles.	Quarter ending September 30, 1882.					
	Newcastle-upon-Tyne.	Sunderland.	Hartlepool and Middlesbrough.	Carlisle.	Total for consulate and agencies.	Total for the year.
Chemicals	$34,025 60		$3,180 90		$37,206 50	$141,516 96
Coals	6,039 70	$2,182 17			8,221 87	32,615 22
Cotton				$53,070 34	53,070 34	154,337 70
Furs and skins	30,635 14				30,635 14	137,727 07
Glass	15,467 16	2,013 33			17,480 49	59,355 04
Grindstones	4,192 93				4,192 93	21,563 83
Gypsum	1,663 80				1,663 80	9,415 00
Iron and steel	23,721 06		59,975 98	200,177 70	283,874 04	788,956 94
Linen and thread				1,319 21	1,319 21	15,333 56
Paints	29,689 90				29,689 90	117,786 56
Soda	156,476 20				156,476 20	556,913 17
Miscellaneous	45,614 08		24,676 52	252,102 40	322,393 00	1,159,134 64
Total	347,525 57	4,195 50	87,832 70	306,669 65	746,223 42	2,994,655 69
Total for preceding year	300,874 36	1,127 81	184,962 90	113,634 23	600,599 30	2,635,311 35
Increase	46,651 21	3,067 69		193,035 42	145,624 12	359,344 34
Decrease			97,130 20			

EVAN R. JONES,
Consul.

NOTTINGHAM.

SIR: I have the honor to forward herewith the statement showing the value of declared exports from this consular district to the United States during the four quarters of the year ending September 30, 1882. By that statement it appears that the declared value of the exports from this district to the United States during the year was $9,774,548:65; the value for the year ending September 30, 1881, was $8,467,304.18, showing an increase of $1,307,244.47. As the business of the year ending September 30, 1881, was a large advance upon that of any previous year, I did not expect the increase shown by this statement. When the business of the last year is compared with that of my first year here it will be seen that the shipments have increased over 200 per cent. The statement shows that there was a small decrease during the last quarter, amounting to $104,794.96. In lace goods there was a falling off of $539,880. But there was an increase in the article of hosiery of $149,313 which, together with an increase in some other articles, reduced the deficiency to the amount named.

I call attention to the large increase in salted skins from $364,369.37 to $687,090.65, and also to the fact that the export of china and earthen ware has advanced from $1,524 to $12,763, the increase in both cases being shipments from Derby, at which place I have asked the privilege of establishing an agency. I think the trade from that place will be much larger for the current year, as the china works have been only lately established there, and are but opening their trade with the United States.

The trade of this consular district having increased more than threefold in the last five years, I do not anticipate any enlargement of that trade in the immediate future.

JASPER SMITH,
Commercial Agent.

COMMERCIAL AGENCY OF THE UNITED STATES,
Nottingham, October 10, 1882.

Statement showing the value of declared exports from the commercial agency of Nottingham to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Lace goods	$1,810,771 00	$2,280,719 00	$1,579,583 00	$1,557,611 00	$7,228,684 0
Hosiery	161,772 00	424,329 00	149,805 00	516,928 00	1,252,834 0
Muslins	6,783 50	21,130 00	12,365 00	4,263 00	44,541 5
Linens	10,088 00	8,686 50	4,915 16	73,182 50	96,872 1
White goods	10,531 00	13,422 00	.....	.....	23,953 0
Crape	17,631 50	.....	.....	.....	17,631 5
Elastic goods	24,449 50	36,785 00	30,649 00	30,610 00	122,493 5
Machinery	10,575 00	13,300 00	18,044 50	6,098 00	48,017 5
Salted skins	161,022 75	129,378 00	168,298 00	228,391 90	687,090 6
Dyed skins	1,300 00	.....	.....	.....	1,300 0
Leather	34,459 00	21,938 00	25,115 50	15,232 14	96,744 6
Venetian red	779 00	2,807 00	1,246 00	1,713 00	6,545 0
Ale	540 00	.....	394 00	2,156 00	3,090 0
Terra alba	934 00	506 00	.....	.....	1,440 0
Silk	2,949 20	1,781 00	.....	4,068 80	8,799 2
Oxide of iron	4,312 00	3,635 00	4,165 00	4,088 00	16,200 0
Cottons	2,141 00	48,129 00	10,467 00	10,915 00	71,652 0
China and earthenware	4,004 00	1,732 00	1,781 00	5,246 00	12,763 0
Oil paintings	1,723 00	837 00	.....	.....	2,560 0
Colocothar	.....	.....	1,747 00	1,406 00	3,153 0
Miscellaneous	3,674 00	6,355 00	10,230 00	7,926 00	28,185 0
Total	2,270,439 45	3,015,469 50	2,018,805 16	2,469,834 54	9,774,548 6
Total for last year	1,605,464 45	2,603,526 41	1,583,683 82	2,674,629 50	8,467,304 1
Increase	666,975 00	411,943 09	435,121 34	.....	1,307,244 4
Decrease	.....	.....	.....	104,794 96	.....

PLYMOUTH.

Statement showing the value of declared exports from the consular district of Plymouth to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Kaolin or China clay	$2,790 20	$3,127 00	$12,813 06	$15,279 95	$34,010 21
Guano	35,928 06	.....	.....	.....	35,928 06
Superphosphate	13,650 53	.....	.....	.....	13,650 53
Arsenic	2,816 36	.....	.....	.....	2,816 36
English farthings	.....	540 60	.....	.....	540 60
Oil paintings and pictures	.....	.....	.....	203 17	203 17
Private effects (wearing apparel, &c.)	.....	.....	973 30	.....	973 30
Books	.....	.....	.....	408 54	408 54
Tooth and hair brushes	.....	.....	.....	586 69	586 69
Total in U. S. gold	55,185 15	3,667 60	13,786 36	16,478 35	89,117 46
Total for preceding year	3,481 31	11,072 33	18,850 11	25,727 20	59,130 95
Increase	51,703 84	.....	.....	.....	29,986 51
Decrease	.....	7,404 73	5,063 75	9,248 85	.....

HENRY FOX, *Consul.*

SHEFFIELD.

REPORT BY CONSUL WEBSTER.

I have the honor to present herewith my report of the trade of this consular district with the United States for the year ending September 30, 1882.

The year has been a prosperous one in the Sheffield trades generally. The total value of exports to our country has been greater than that of any year since 1874, immediately after which commenced the great depression in trade, that continued and increased until 1878, when the exports had fallen from $8,669,976.33 in 1873, to $2,140,443.40.

The following table will show the totals for the last five years and exhibits the fact that the trade is gradually recovering itself till it approaches the amounts of its best days.

Totals of Sheffield trade with the United States for the last five years.

1878	$2,140,443 40
1879	2,723,943 18
1880	5,189,692 84
1881	5,955,769 89
1882	6,217,748 54
Total	22,227,598 85

The largest year's business done by Sheffield with the United States was that of 1873, amounting to $8,669,976.33.

The great bulk of this trade is in the three great industries, Bessemer rails, steel, cutlery. The aggregate amount of the three for the present year is $5,263,594.58, against $949,154.96 for all other exports.

The greatest amount in value of Bessemer rails sent to the United States in any one year was in 1874, being $2,146,555.56. The amount for the present year is $2,011,720.80. During the years 1876 to 1878, inclusive, this trade was entirely suspended, and it then seemed probable that our country would from that time be able to supply her own demands. But it will be seen that the present year nearly equals 1874, the year of largest export of this material.

Now, considering the fact that the price of Bessemer rails is at the present time less by more than one-half than in the year 1874, it will appear that the quantity taken by the United States in 1882 must be at least double that of 1874, the year of greatest export of rails. This very large demand for Sheffield rails, in addition to the immense production of our own mills, indicates the present vast expansion of railway building in the United States.

When we turn to steel we shall find a different aspect of the trade of the last ten years. In 1873 the value of steel exported to our country was $3,267,879.66, against $1,959,782 in the present year—a large decrease. In judging of the quantity, there is not the element of difference in price to be considered as in the case of Bessemer rails, since the price of best steel is nearly the same now as in 1873.

Taking into consideration the remarkable progress of our country in the last ten years in all branches of industry that must have developed a greatly increased demand for a superior quality of steel that has heretofore been supposed to be made only in Sheffield, there seems to be clearly indicated an increasing ability to compete in quality with the best makers in the world. This implies a rapidly growing independence of a foreign market. This is the more significant as the demand for steel does not partake of that spasmodic character that belongs to Bessemer rails.

Again, the same indication of growing independence may be seen when we consider the third great branch of Sheffield industry, cutlery. The amount in value of cutlery of all kinds exported to the United States in 1873, the year of greatest trade, $1,392,083.95, against $1,297,091.61 in the present year, showing a difference in our favor of $94,992.

As there has been no increase in our demand for Sheffield cutlery

during the last ten years, notwithstanding our great growth in population and wealth, and consequent ability to purchase the best of the world's products, it seems certain that our cutlery manufacture must have greatly extended and improved in quality. It is evident that home makers are more largely supplying the home market.

Still the fact remains that our country calls for Sheffield cutlery to the amount of more than $1,000,000 annually. Now, unless the demands of the American people upon our own manufacturers are so great that they cannot be supplied, as is the case with Bessemer rails, then the indication is that there in a quality and finish in Sheffield cutlery that a large portion of American buyers prefer and will have.

It would seem that our own skill and enterprise may be relied upon to reach a degree of excellence in this important industry that will, at no distant day, leave nothing to be desired.

C. B. WEBSTER,
Consul.

Declared value of exports from the consular district of Sheffield to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Steel	$443,937 98	$522,297 22	$515,504 87	$478,042 10	$1,959,782 17
Iron	515 45	48 08	181 83	.....	745 36
Spiegeleisen	28,845 87	30,537 30	22,190 69	3,759 37	80,333 23
Bessemer steel rails	453,598 76	568,559 50	561,211 44	428,352 10	2,011,721 80
Bessemer steel blooms	3,389 62	2,955 80	2,171 95	3,439 54	11,956 91
Steel:					
Tires	7,070 79	13,230 24	7,038 99	2,907 70	30,247 72
Springs	3,148 63	2,524 48	2,455 52	.....	8,128 63
Rolls	1,803 04	1,803 05	.....	.....	3,606 09
Castings	38 48	.....	.....	38 68	77 16
Iron forgings for axles	9,067 39	3,060 37	.....	.....	12,127 76
Iron deck plates	.....	.....	7,017 97	.....	7,017 97
Stove grates and fenders	663 43	319 98	1,090 83	882 17	2,956 41
Anvils	901 48	1,768 57	578 63	361 06	3,609 74
Machinery, steam-engines, steam-hammers, &c	37 42	1,722 46	28,468 05	26,820 99	57,048 92
Cutlery	336,917 33	311,013 92	261,202 49	387,957 87	1,297,091 61
Electro-plated, wooden, glass, and other table ware	1,546 68	568 70	169 76	690 00	2,975 14
Files	17,163 74	19,433 50	22,669 82	15,532 84	74,799 90
Saws	132 56	.....	466 76	2 43	601 75
Edge and other tools	19,114 66	13,667 99	18,310 79	17,745 97	68,839 41
Garden tools, scythes, sickles, &c	1,436 45	6,118 00	1,087 09	317 66	8,959 20
Sheep-shears	37,181 06	21,943 47	9,247 92	13,812 65	82,185 10
Umbrella ribs	6,852 15	1,800 47	6,978 08	3,083 09	18,713 79
Copper plates for engraving	23 65	3 16	16 65	58 21	101 67
Trays and waiters (japanned iron)	45 67	81 06	33 20	.....	159 93
Surgical instruments	348 05	61 31	95 01	130 99	635 36
Optical goods	5 34	140 90	809 56	192 49	1,148 29
Magnets	.....	557 65	548 17	323 62	1,429 44
Magneto-electric machines	.....	252 69	.....	.....	252 69
Measuring tapes and chains, rules, straight-edges, &c	9,335 51	9,529 93	6,177 85	6,979 13	32,022 42
Nautical instruments, ships' logs	.....	.....	.....	441 39	441 39
Sporting tackle and gun furniture	1,712 27	1,587 13	1,402 01	2,261 06	6,962 47
Dog-collars, leads, &c	531 05	17 51	287 15	251 42	1,087 13
Steel "doctors" or calico web	331 05	.....	.....	.....	331 05
Steel graining combs	947 49	.....	526 98	1,103 52	2,577 99
Needles	374 97	57 60	37 38	.....	469 95
Hackle pins	.....	64 11	.....	45 13	109 24
Screws, nuts, and bolts	.....	324 99	578 06	177 59	1,080 64
Iron teeth	.....	125 55	.....	.....	125 55
Tenter hooks	.....	.....	95 77	.....	95 77
Salted skins	78,722 00	74,837 49	82,272 22	94,744 92	330,576 63
Oil leather, "chamois"	.....	58 83	109 74	.....	168 57

Declared value of exports from the consular district of Sheffield, &c—Continued.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Leather, walrus and bull-neck for buffing			238 58		$238 58
Parchment		241 97			241 97
Glue	14,760 12	12,437 41	13,991 14	11,335 62	52,524 29
Grease	823 65	1,502 77	1,552 90	790 57	4,669 89
Buffalo-horn tips			826 55	2,095 52	2,922 07
Sheepwash			1,583 82	4,071 68	5,655 50
Grindstones	4,534 16	1,978 34	5,776 59	6,624 25	18,913 34
Millstones		81 40		295 09	376 49
Whetstones	5 38	11 96			17 34
Scythe-stones		10 11			10 11
Encaustic tiles	607 66				607 66
Crucible clay				147 67	147 67
Hair seating	861 00	437 98	2,487 03		3,786 01
Rat traps			160 60		160 60
Brushes		5 10			5 10
Papier-maché goods		25 87			25 87
Leather goods, jewelry cases		16 96			16 96
Cheap jewelry, horn and nickel, silver brooches and bracelets	326 29		211 47	47 72	585 48
Pill-boxes	448 66				448 66
Surgeons' flax lint	198 22				198 22
Surgical silk hose	77 61		187 60		265 21
Wearing apparel	224 70				224 70
Paper and books	27 25	115 32	142 71	68 98	354 26
Ink				5 97	5 97
Cheese	38 93				38 93
Wines		636 22			636 22
Brandy			266 06	303 68	569 74
Wax	4 58			8 85	13 43
Sundries	495 69	104 38	164 73	21 52	786 32
Total in United States gold	1,484,178 92	1,628,678 80	1,588,623 01	1,516,272 81	6,217,748 54
Total for preceding year	1,174,805 48	1,369,074 27	1,754,799 34	1,657,090 80	5,955,769 89
Increase	309,368 44	259,604 53			261,978 65
Decrease			166,176 33	140,817 99	

C. B. WEBSTER, *Consul.*

SOUTHAMPTON.

Statement showing the value of declared exports from the consular district of Southampton to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarters ending— December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	Total for the year.
Live stock	$8,759 70.00		$53,677 49.50	$19,538 99.75	$81,976 19.25
Bristles	1,690 45.55		1,094 24.60	300 90.65	3,085 60.80
Manufactured goods	837 86.80		733 87.50	1,209 92.20	2,781 66.50
Live plants	650 64.45	$260 35.45			910 99.90
Wearing apparel	562 66.10	128 59.25		146 72.50	837 97.85
Sundries	165 86.10				165 86.10
Chamois skins		341 98.50			341 98.50
Seeds		143 91.85			143 91.85
Painting				121 66.25	121 66.25
Total in United States gold	12,667 19.00	874 85.05	55,505 61.60	21,318 21.35	90,365 87.00
Total for preceding year	5,758 32.00	10,609 93.40	12,271 84.05	15,298 77.95	43,938 87.40
Increase	6,908 87.00		43,233 77.55	6,019 43.40	46,426 99.60
Decrease		9,735 08.35			

WM. THOMSON, *Consul.*

EXPORTS FROM TUNSTALL.

REPORT BY CONSUL LANE.

I have the honor to transmit herewith a report on the trade of this district with the United States for the year ended September 30, 1882.

It will be seen that the figures show a falling off in the exports from this district to the United States of $395,926.77 from the preceding year. This large apparent decrease would be misleading if not explained. The large decrease for the quarter ending December 31, 1881, which was more than half that for the whole year, was chiefly the immediate result of the strike which prevailed during more than half of that quarter, and also contributed largely to the falling off in the succeeding quarter. The remainder of the net decrease is accounted for by the change in the place of declaring certain invoices of goods other than earthenware, china, &c., from this to the Birmingham consulate and its agencies. For the last three quarters of the year just closed there has been an actual increase in the exports to the United States of the staple products of this district of about $50,000 over the corresponding period of the preceding year, and the increase for the last quarter alone over the corresponding quarter of 1881, in earthenware, china, &c., is about the same amount, showing that since January 1, last, the exports to the United States have held their own and are now decidedly on the increase. Still it is stated by manufacturers, upon informal occasions, that orders are not now plentiful in number nor promising in amounts. I am convinced, however, that they expect a fairly good demand for an indefinite time to come, especially for the better class of goods. The complaint about unprofitable prices continues, and doubtless with some foundation, but there is sufficient outward evidence of prosperity generally among the manufacturers to convince me that those doing a losing business are very few. The United States markets are of such paramount importance to the staple industry of this district that the feeblest pulsations therein, either in demand or prices, always increase the prevailing anxiety. A deep interest in every contingency likely to affect that market is constantly noticeable in frequent inquiries as to harvest prospects, the probabilities about future legislation, &c. It may not be amiss to present a few figures for the purpose of more definitely showing that the United States continues, as it has done for many years, to furnish the Staffordshire potteries with their best customers. I take for this purpose the first nine months of the present calendar year. The aggregate declared value of the exports of what for convenience we may call pottery, to all countries, during that period, was $7,886,567.

The invoices of the same class of merchandise authenticated at this consulate during the same time amounted to $2,721,862, showing that of the total exports of pottery from Great Britain thus far in 1882, the United States have taken 24½ per cent. through this consulate alone. When to this are added the shipments of similar goods produced outside of this district, and invoices of goods manufactured here but declared at other consulates, it will be found that fully one-half the total pottery exports of Great Britain find their market in the United States. There remains, of course, the home trade to modify the relative importance of these figures. This, I am informed, shows some improvement, but is not yet considered encouraging either in volume or prices. With

reference to the trade with the United States the grievance of reduced profits—if it is one—is now supplemented with the further embarrassment that American buyers are more fastidious in taste, and more exacting in the quality of their selections than formerly. It is a recent discovery here that Americans are sometimes critical as well as extravagant. Jugs are no longer invoiced as ewers, nor all sorts of inappropriate covers made available to complete an urgent order for soup tureens, events which a shipper facetiously told me had once come under his notice. I am often pleased by being informed of the very intelligent criticisms which some American has made upon some new design or completed work in the artistic department of pottery.

Of course this "improvement in taste," as it is called, is acknowledged usually with a good deal of surprise; and although perhaps not the proper subject for a consular report, I venture to mention that this surprise at anything approaching excellence in American tastes or skill is something that Americans must be prepared to find in all European countries so far as my limited observation extends. However, the recognition of the excellence is scarcely less pleasing for that.

Whether the present moderate profits of the earthenware trade will ever again reach the high level of former times is a problem of serious concern to English manufacturers.

EDWARD E. LANE,
Consul.

UNITED STATES CONSULATE,
Tunstall, October 17, 1882.

EXPORTS FROM WORCESTERSHIRE.

REPORT BY CONSULAR AGENT MORTON, OF KIDDERMINSTER.

I have the honor to report that during the year ended September 30, 1882, the number of invoices certified in my district has been 453, against 241 for the previous year, and the value of goods certified, £129,602 5*s.* 11*d.*, against £44,817 16*s.* 10*d.*, being an increase of £84,784 9*s.* 1*d.* during the past year.

Carpets.—The carpet trade of the past year has on the whole been somewhat better in Kidderminster, but a want of confidence and low prices have prevailed more or less, the latter caused in a considerable degree by the overproduction and a number of weak firms who have been compelled to accept unremunerative prices for their goods. No particularly new features in the trade can be noted. It may, however, be interesting to mention a power-loom for weaving seamless Kidderminster carpets of a width of four yards in a Jacquard power-loom, which is now at work at Messrs. Watson & Naylor's mills at Kidderminster. This ponderous machine is, like the ordinary power Kidderminster looms, worked by a woman. It has two yard-wide Jacquard frames, and in order to deal with the large number of threads to be raised at each motion the harness is multiplied by every cord being divided into three, thereby lifting that number of threads in lieu of a single one. It has a very ingenious arrangement for throwing four shuttles alternately, or as may be required. I am informed that a large number of these carpets have been sold, none, however, for export to the United States. A description of carpet in Brussels and velvet pile, termed "moresque," has lately been made by Messrs. Morton & Sons, of Kidderminster, and adopted by other firms,

which has had a large sale both in Europe and in the United States. The effect is produced by the introduction of a thread of black yarn twisted in with the yarn of other colors used in the work. This style of goods, I am informed, is not entirely new, but is a reproduction of a make in vogue many years back, but which had for a long period been neglected.

The export of glass goods from Stourbridge has been larger during the past year, but this trade is much hampered by the action of the artisans' trade union, which, by limiting the amount of work to be produced by each man to that which can be performed by the slowest workman, has made the cost of production unduly high, and has caused very large quantities of glass of the lower qualities to be imported from Belgium, manufacturers being known on taking a large order to have the whole of it made in that country.

Hops.—The hop crop has failed in Worcestershire this year, the yield being of the most meager description, amounting to below one-twelfth of the yield of last year in many gardens, it being estimated at about 1,000 pockets against 15,000 last year, and in some few favored spots full crops have, however, been grown. At the great hop fair held at Worcester on the 19th of September only 38 pockets of hops were pitched, and as much as £20 per cwt. was paid for the new crop. Large sums of money have been made by the fortunate holders of last year and the previous year's hops.

Art exhibition.—On the 18th of July last an exhibition of fine arts, Worcestershire industries, and objects illustrative of the history of the city and county of Worcester was opened in the city of Worcester by Earl Beauchamp, the lord lieutenant of the county. The exhibition is to remain open a period of three months, and has so far proved a financial success. The fine arts and historical sections of the exhibition are very well filled, and there are several well-known and highly-esteemed pictures by artists who are natives of Worcestershire. There is also a group of statuary by Mr. Thomas Brock, a very rising artist who was originally employed in the Worcester Royal Porcelain Works, and has already executed several works of high merit, among others the admirable statue of Richard Baxter, and his Rowland Hill lately erected in Kidderminster. The industrial exhibits are many, and of most varied description, ranging from an anchor of several tons in weight, made by Messrs. Noah Hingley & Sons, of Dudley, to the needles and fish-hooks of Redditch. A very large exhibit of the machinery used in producing carpets and rugs, including machines for the preparation of the wool as delivered to the spinners, is sent from Kidderminster, as also numerous samples of high-class carpets and rugs. Amongst other interesting objects in this department is a hand carpet loom used for the making of carpets before the introduction of the power carpet loom, working side by side with the latest improved power loom. The town of Stourbridge sends a large and magnificent exhibit in the shape of white, colored, and engraved glass, of high excellence, including many high-art specimens from the celebrated works of Messrs. Thomas Webb & Sons and other well-known makers. There are also from Stourbridge exhibits of leather, skin, rugs, carriages, water and steam pipes and fittings, fire-clay goods, crucibles and bricks, anvils, spades, forks, and scythes, and other instruments of agriculture, and also various articles of furniture, such as sideboards, cabinets, chairs, tables, and other articles of excellence of style and manufacture.

From Dudley are sent several cases of various descriptions of manufactured iron of high excellence from the works of the Earl of Dudley,

and from those of the Messrs. Hingley & Sons, of the Netherton Iron Works. Also, various castings, including segments of cylinders for bridge piers, eleven feet in diameter, as made for New South Wales, various descriptions of churns, kneading and mixing machines, and very fine specimens of brass-work in the form of chandeliers, fenders, fire-grates, shovels, tongs, &c. This town also sends a very good exhibit of point lace.

Redditch sends a large assortment of needles, fish-hooks, and fishing tackle, with various machines used in the manufacture.

The quiet old borough of Bewdley sends a very good exhibit of numerous specimens of an industry which has existed there for very many years, although now of small extent, viz, the manufacture of horn combs, spoons, and cups.

Halesowen sends samples of black jewelry and buttons made from buffalo horn and vegetable ivory.

The town of Stourport sends carpets and rugs, also specimens of tinned and enameled hollow-ware manufactured by the Anglo-American Tin Stamping Company.

The city of Worcester has contributed a large number of articles of a most varied character, all of which are manufactured in the city, and comprising carriages and harness, gloves, boots, shoes, and machinery for manufacturing the same, umbrellas, sailing signals, and iron work, magnificent specimens of porcelain and chinaware from the Royal Porcelain Company, and Messrs. Graniger & Co., samples of and articles used in the making of Worcester gin, cordials, beer, vinegar, pickles, sauces, and other condiments, and the various potables known as British wines; also several exhibits of aerated waters and drinks of various descriptions, brushes, guns, house-furniture, horse-hair seating and carpeting, and machinery for producing same, encaustic tiles and stained wood, tiles for flooring, of a new manufacture, produced by Messrs. C. Webb & Sons, japanned and enameled tinware, kitchen ranges, grates, boilers, heating-apparatus for houses and greenhouses, printing and lithographic machines, steam-engines and water-motors, clocks, carved woodwork, force and lift pumps, boats, agricultural implements, manures and feeding materials, iron girders and tanks, gates, hurdles and fencing, specimens of photography, traveling trunks, and baths of japanned iron.

This exhibition has been largely attended, 147,240 persons having passed the turnstiles from the opening day up to the 23d September.

JAMES MORTON,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Kidderminster, October 3, 1882.

EXPORTS FROM GERMANY.

REPORT BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE-MAIN.

In consequence of the favorable results of the harvest, the year ending September 30, 1882, has been characterized by greater confidence and activity in business than any of its predecessors since 1872. The manufacturing interests have been steadily gaining, and exports, espe-

cially to the United States, have greatly increased. For the year ending September 30, 1881, the exports from Germany were as follows:

From the district of the consulate-general at Berlin	$25,856,008 13
From the district of the consulate-general at Frankfort-on-the-Main.	25,256,954 93
Total from Germany	51,152,963 06

For the year ending September 30, 1882, they were:

From the district of the consulate-general at Berlin	$33,481,219 95
From the district of the consulate-general at Frankfort-on-the-Main.	30,986,648 50
Total from Germany	64,467,868 45

an increase over the preceding year of $13,314,904.39, or a little over 26 per cent.

This increase of exports to the United States is perceptible in nearly all of the twenty-three consular districts of Germany, only four of which report a slight decrease, viz, Cologne, Mannheim, Munich, and Stuttgart. This increase of exportation is not due to an increased demand from the United States of any particular article or articles of manufacture, but a close inspection of the export statements will show that the exports in general have increased; in other words, that German merchants and manufacturers have sought and found in the United States a market for a greater quantity of the articles formerly exported, and have added others to the list of articles formerly exported. The latter has been observed at this consulate-general and will be borne out by the following: The number of invoices legalized at this consulate-general during the year ending September 30, 1881, was 1,647, while for the year ending September 30, 1882, it was 2,204, an increase of 557, or more than 33 per cent., and the same or nearly the same ratio of increase will be found to prevail in most in the consulates in Germany.

FERDINAND VOGELER,
Consul-General.

REPORT BY CONSUL-GENERAL BREWER, OF BERLIN.

There has been a marked improvement in trade during the past year over that of the year 1880–'81. As shown in the consular reports, the declared value of goods exported to the United States during the year ending September 30, 1882, amounted to $64,467,868.45; while for the year ending September 30, 1881, they only amounted to $51,752,963.06; showing an increase for 1881–'82 over that of 1880–'81 of $13,314,905.39. In the Frankfort general-consulate district the increase was $5,729,693.57, and in this general-consulate district the increase amounted to $7,585,211.82. The increase in the declared value of goods invoiced at the Berlin consulate alone during the year was $1,405,941.11. I am unable to give any official figures showing the value of goods exported from Germany since January 1, 1882, to other countries than our own, but I have no doubt there has been a fair increase over the value exported during the preceding year. Great effort has been made, and is now being made, by the German Government to foster and increase its export trade by increasing its consular representation abroad, and urging all its consular officers to renewed and increased zeal in that direction.

Undoubtedly the export trade from this country to America has been greatly augmented on account of the large German population which

we have. Very many of the wholesale houses, jobbing houses, and dealers in Germany have their branch houses in New York, Chicago, and other American cities, which are always supplied with such goods as the American market may demand, at short notice, by the principal house here.. I am satisfied that the export trade of England, France, and Germany has been very largely increased by their merchants and manufacturers establishing such branch houses for their business in foreign lands, and I commend this system to the favorable consideration of the merchants and manufacturers of the United States who are desirous of extending their export trade.

MARK S. BREWER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Berlin, December 1, 1882.

GER

1.—CONSULATE-GENERAL

Statement showing the value of declared exports from the district of the consulate-general at wick, Chemnitz, Dresden, Hamburg, Leipsic, Stettin, duri

Articles.	Annaberg.	Berlin.	Bremen.*	Breslau.
Albumen and yolks of eggs				
Albums		$752, 955 77		
Amber, manufactures of		323 65		
Animals, domestic and wild, birds, &c			$58, 975 91	
Antiquities				
Artificial flowers, fancy feathers		134, 143 94		
Basket and cane ware, whips, sticks, &c		3, 538 45	44, 880 74	
Beet sugar, grape sugar, raw sugar		19, 830 38		$2, 265 6
Books		14, 419 20	116, 608 10	
Bristles, feathers, horse-hair, hair, cloth, &c		1, 319 77		
Chemicals, drugs, dyes, ink, &c		125, 739 02	165, 285 85	
China, glass, and earthenware, &c		86, 219 64	249, 491 87	27, 703 8
Chromos		35, 836 58		4, 307 7
Clothes, ready-made		1, 230, 547 72	2, 430 97	
Colors		29, 027 21		
Coffee, chicory, cocoa				
Cotton and cotton-mixed goods		67, 924 28		
Cotton gloves, silk gloves, wool gloves		486 30		
Dress and piece goods, damasks				
Dried fruits, prepared vegetables, &c				
Electrotypes		71 40		
Embroideries	$28, 886 00	36, 869 38		
Engravings		16, 403 26		
Fancy goods, notions, toys, albums	28, 249 00	41, 671 40		4, 575 6
Glue, gelatine				
Grain, plants, and seeds, rapeseed oil		2, 077 75	11, 955 95	
Hemp, and hemp bags				
Hosiery, of cotton, silk, wool				
Human hair, braids		771 86	445 30	
Jewelry, silver ornaments, &c		1, 757 27		
Imitation jet goods, buttons, &c	106, 307 00	288, 988 96		
India-rubber goods		3, 310 71		
Ivory, and ivory goods				
Laces, trimmings, &c	1, 258, 639 00	63, 549 50		
Lamps		6, 570 94		
Leather gloves		187, 377 01		305, 73
Leather, manufactures of, furs, skins, &c		90, 678 53		7, 996
Liquors, malt and distilled, wines, fruit juice		32, 611 52	111, 575 00	31, 446 7
Lithographs		716 89		
Linen and linen-mixed goods		88, 263 66		536, 345 5
Looking-glass plates, unsilvered				
Manuring salt				
Metals, and metal ware, machinery		53, 674 12	931, 199 58	176, 46
Minerals			29, 498 91	2, 309
Miscellaneous	1, 354 00	68, 641 35	36, 410 74	9, 634
Musical and scientific instruments		131, 524 42		
Paintings		77, 325 79		
Paper, manufactures of, stationery	7, 354 00	234, 104 82		
Percussions and ball-caps, arms, &c				
Personal effects			68 60	
Portland cement				
Photographs		9, 668 61		
Provisions		1, 071 00	323, 082 38	
Rags, waste paper, old metal		74, 869 59	42, 197 40	
Rennets, guts, bladder		13, 160 39		
Silk and silk-mixed goods		43, 188 61		
Statues		1, 835 24		
Straw hats, plaits, &c		135 00		
Tobacco and cigars			145, 060 53	
Velvet and plush goods		198, 506 32		
Watch movements, clocks				
Woolen cloths		363, 770 55		
Woolen and woolen-mixed goods		248, 558 34	35, 471 99	21, 429 9
Worsted yarn, dyed		337, 205 98		
Total in United States gold	1, 430, 789 00	5, 121, 239 08	2, 303, 739 82	1, 129, 606
Total of preceding year	1, 406, 622 00	3, 715, 295 97	1, 047, 780 14	1, 035, 224
Increase	24, 167 00	1, 405, 943 11	1, 255, 959 68	94, 384

* Bremen, inclusive of late commercial agency of Geestemunde.
Exclusive of reimported petroleum barrels of American manufacture.

MANY.

OF BERLIN.

Berlin, including the districts of the consulates at Annaberg, Berlin, Bremen, Breslau, Brunswick, Chemnitz, Dresden, Hamburg, Leipsic, Stettin, and Total. the four quarters of the year ending September 30, 1882.

Brunswick.	Chemnitz.†	Dresden.	Hamburg.	Leipsic.	Stettin.	Total.
.....	.....	$16,195 17	.....	.....	.....	$16,195 17
.....	.....	.....	.....	.....	.....	752,955 77
.....	.....	.....	.....	.....	$18,264 81	18,587 96
.....	.....	.....	$26,679 81	.....	380 80	86,036 52
.....	.....	696 15	.....	.....	.....	696 15
$6,354 72	.....	.....	.....	.....	.....	140,498 66
.....	.....	.....	56,280 88	.....	.....	104,700 07
42,269 10	.....	.....	637,423 38	.....	12,336 00	715,124 54
16,017 89	.....	2,508 24	.....	$286,683 31	122 37	436,359 11
.....	.....	.....	663,149 75	159,456 36	67,069 53	889,695 41
187,644 82	$29,134 73	112,601 27	676,598 95	154,571 83	18,748 58	1,470,325 05
23,996 84	.....	172,544 21	50,788 88	.....	400 00	611,145 30
.....	.....	.....	.....	.....	.....	40,144 32
.....	.....	.....	.....	.....	.....	1,232,958 69
.....	.....	.....	.....	.....	.....	29,027 21
26,287 93	.....	.....	.....	.....	.....	26,287 93
.....	.....	.....	.....	139,261 08	.....	207,185 36
.....	1,422,002 07	.....	.....	.....	.....	1,422,488 37
.....	1,429,797 92	.....	.....	.....	.....	1,429,797 92
38,596 52	.....	.....	889,747 86	.....	.....	928,344 38
.....	.....	.....	.....	.....	.....	71 40
.....	326,780 52	.....	.....	.....	.....	392,535 90
.....	.....	.....	.....	.....	.....	16,403 26
128,759 24	100,964 51	17,063 97	51,292 28	50,961 14	.....	423,537 14
4,340 81	.....	.....	.....	.....	.....	4,340 81
.....	.....	.....	17,360 01	.....	34,301 38	64,795 09
.....	.....	.....	.....	.....	149,295 72	149,295 72
26,560 10	4,104,384 75	.....	.....	.....	.....	4,130,944 85
.....	.....	.....	124,362 15	.....	.....	125,579 31
.....	.....	.....	68,867 64	.....	.....	70,624 91
1,514 39	.....	.....	.....	.....	.....	396,810 35
27,534 45	.....	.....	165,475 46	.....	.....	196,326 62
.....	.....	.....	162,326 22	.....	.....	162,326 22
.....	1,170,451 74	7,192 84	.....	42,663 94	.....	2,542,497 02
.....	.....	.....	.....	.....	.....	6,570 94
83,874 46	.....	.....	281,681 63	590,665 76	.....	1,449,332 43
16,291 31	.....	.....	557,129 62	972,947 40	.....	1,645,043 66
91,857 60	.....	.....	50,967 06	.....	27,422 38	345,880 27
.....	.....	.....	.....	.....	.....	716 89
.....	.....	198,556 09	.....	.....	.....	823,165 29
13,938 50	.....	.....	.....	.....	.....	13,938 50
548,865 00	.....	.....	425,057 06	.....	.....	973,922 06
29,872 67	.....	.....	357,537 29	17,934 50	64,727 50	1,631,405 88
48,646 22	.....	.....	.....	.....	8,944 04	89,398 69
13,748 62	160,639 74	29,354 07	278,307 67	167,621 25	3,867 49	768,999 66
74,398 12	741,739 70	14,738 11	26,524 31	129,095 47	.....	1,118,020 13
.....	.....	.....	.....	.....	.....	77,325 74
6,269 35	.....	133,123 05	32,682 35	.....	.....	413,533 57
.....	.....	.....	28,000 38	.....	.....	28,000 38
.....	.....	.....	.....	.....	.....	68 60
.....	.....	.....	180,083 86	.....	11,656 35	191,740 21
.....	.....	9,067 51	.....	.....	.....	18,756 12
.....	.....	.....	.....	.....	11,775 35	335,928 73
57,400 42	.....	263,093 56	535,725 20	.....	909,258 05	1,882,554 22
.....	.....	.....	33,060 31	.....	.....	46,220 70
.....	.....	.....	.....	.....	.....	43,188 61
.....	.....	.....	.....	.....	.....	1,835 24
.....	.....	17,931 63	.....	.....	.....	18,066 63
.....	.....	10,480 43	10,076 04	.....	.....	166,217 00
17,206 93	.....	.....	239,925 66	.....	.....	455,638 91
.....	.....	8,003 94	.....	.....	.....	8,003 94
.....	.....	.....	.....	.....	.....	363,770 55
.....	.....	23,928 95	55,432 49	685,470 14	.....	1,070,287 91
21,525 97	.....	.....	.....	.....	.....	258,731 95
1,554,771 98	9,485,895 68	1,037,099 19	6,683,154 20	3,396,332 18	1,338,589 85	33,481,219 95
1,362,749 40	8,363,557 67	805,625 08	4,549,083 09	2,412,308 39	1,197,761 62	25,896,008 12
192,022 58	1,122,338 01	231,474 11	2,134,071 11	984,023 79	140,828 23	7,585,211 82

†Exclusive of Annaberg, now a newly-established consular district.

MARK S. BREWER.
Consul-General.

2.—CONSULATE-GENERAL OF FRANKFORT-ON-THE-MAIN, GERMANY.

Exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, and the consulates subordinate thereto, during the year ended September 30, 1882.

[Values given in United States gold currency.]

Articles.	Aix-la-Chapelle.	Barmen.	Cologne.	Crefeld.	Dusseldorf.	Frankfort.	Kehl.*
Baskets and basket ware							
Brushes and hair pencils	$154 76						
Bronze powder and leaf metal							
Beads and bead ware							
Books, stationery, photographs, &c	22,268 20		$11,456 16	$76,439 27		$78,925 21	$11,306 14
Buttons and button stuffs		$209,021 15		12,277 37	$19,325 73		
Clay, for pipes						53,504 36	
China, glass, porcelain, and earthenware	190,959 19		10,265 97			50,851 18	451 33
Cotton dress goods, velvets, and furnishings				2,643,832 65			
Corsets							
Cloth	1,136,280 59						
Cologne water			10,062 66				
Decalcomania							
Dyes, drugs, chemicals, &c		173,750 94	220,144 15	56,049 30	25,786 47	508,856 16	23,142 85
Fancy goods and toys	2,079 67					161,232 07	11,667 17
Fancy paper							
Glass plate, window, and mirror glass							
Glassware (hollow), watch crystals, spectacle glasses, &c						18,621 57	8,484 00
Gold, silver, and metal paper							
Gas-burners, lava gas-tips, brass lamps							
Grape sugar and sirup			54,102 71				
Hatters' fur						165,049 41	
Hair, prepared and raw						69,195 31	8,153 95
Hares' hair						134,389 20	
Instruments						3,935 80	
Jewelry and precious stones						3,881 40	
Kid gloves	100,282 45						
Lead pencils, and lead for pencils							
Leather, hides, and skins			130,953 50			749,358 57	213,245 63
Leather goods						53,177 39	
Lead, zinc, and spelter	271,330 55					63,235 27	
Leonic ware							
Linen, woolen, and cotton goods	5,313 32	1,182,450 65		20,886 91	456,333 15	338,618 21	6,571 18
Lithographic stones and materials							
Machinery	404 76		6,776 15	11,690 38	7,235 38	30,740 34	
Mineral water			377,386 50		11,718 40	100,382 21	
Music, musical strings, and instruments						15,947 34	
Optical goods						222 80	

Oil paintings and chromos				1,415 12	41,411 09	2,964 17	
Platina ware and plates						22,542 05	
Prunes, dried fruits, nuts, land produce, &c		14,071 66				198,320 49	
Pins and needles	37,037 28						
Rags						33,985 78	
Railway rails, old and new, iron ware, cutlery, &c	43,082 20	1,289,849 34	525,711 64	1,337,844 13	835,416 18	3,667 55	
Sardines and herrings						12,384 83	
Seeds, plants, &c						13,798 21	
Slates and slate pencils							
Silk, silk goods, velvets, ribbons, and braids, &c	1,870 28	2,176,834 62	530,456 86	1,459,300 31	21,022 92	7,822 10	71,891 50
Smokers' articles, snuff, cigars, and tobacco						575 34	1,451 00
Soaps and perfumery						9,499 09	
Statuary and sculpture							
Sundries	2,951 17	17,216 25	48,162 74	9,134 88	97,225 12	11,250 85	7,462 30
Steel, manufactured, and Bessemer	1,150 83		224,340 06			1,009 66	
Tapestry and embroidery ware, laces						8,896 30	
Wine, brandy, beer, and liquor	76 77		88,294 63	20,446 56	2,096 12	108,713 89	1,793 77
Watches, clocks, and watchmen's detectors						1,078 07	642 25
Total	1,816,142 02	5,063,194 61	2,244,203 59	5,649,316 88	1,517,571 22	3,037,533 01	366,263 04
Total for preceding year	1,423,965 35	3,784,109 97	2,600,912 97	3,928,499 51	1,013,348 72	2,500,046 93	
Increase	392,176 67	1,279,084 64		1,720,817 37	504,222 50	537,486 08	366,263 04
Decrease			356,709 38				

* From July 18, 1882, to September 30, 1882.

Exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, and the consulates subordinate thereto, during the year ended September 30, 1882—Continued.

Articles.	Mannheim.	Mayence.	Munich.	Nuremberg.	Sonneberg.	Stuttgart.	Total.
Baskets and basket ware				$196,485 99	$7,446 15		$203,932 14
Brushes and hair pencils				29,851 53			30,006 29
Bronze powder and leaf metal			$23,805 38	421,853 03			445,658 41
Beads and bead ware				55,562 65			55,562 65
Books, stationery, photographs, &c	$23,151 20	$332 18	45,717 16			$13,394 61	283,080 13
Buttons and button stuffs				12,930 00			253,554 25
Clay, for pipes		321 90		13,994 10			67,820 36
China, glass, porcelain, and earthenware	2,575 22	2,149 77	9,500 51	38,773 08	712,665 83	18,940 87	1,037,132 95
Cotton dress goods, velvets, and furnishings	124,362 15						2,768,194 80
Corsets						432,712 70	432,712 70
Cloth							1,136,280 59
Cologne water							16,062 66
Decalcomania				68,257 79			68,257 79
Dyes, drugs, chemicals, &c	1,214,059 85	189,155 38	9,548 26	69,380 89	42,106 05	123,956 78	2,655,937 08
Fancy goods and toys	57,840 93		5,199 04	277,532 21	616,698 79	2,294 76	1,135,444 64
Fancy paper				94,124 99			94,124 99
Glass plate, window and mirror glass	7,895 78			1,175,760 79			1,183,656 57
Glassware (hollow), watch crystals, spectacle glasses, &c	41,611 57						68,717 14
Gold, silver, and metal paper			43,732 91				43,732 91
Gas-burners, lava gas-tips, brass lamps				21,342 53	5,133 24		26,475 77
Grape sugar and sirup							54,102 71
Hatters' fur							165,049 41
Hair, prepared and raw	688 20	4,465 80					82,503 26
Hares' hair							134,389 20
Instruments			5,352 75	30,086 41		1,359,37	40,734 33
Jewelry and precious stones	13,186 20	492,149 20	4,701 46	12,095 23	6,176 12	23,917 43	556,107 04
Kid gloves			106,144 87		1,328 86		207,756 18
Lead pencils and lead for pencils				134,043 42			134,043 42
Leather, hides, and skins	680,938 10	327,351 65	6,097 20		9,605 24	15,268 70	2,132,818 59
Leather goods							53,177 39
Lead, zinc, and spelter							334,565 82
Leonic ware				39,106 39			39,106 39
Linen, woolen, and cotton goods	29,191 45			40,120 10	477,005 28	45,450 64	2,601,940 86
Lithographic stones and materials				106,515 75			106,515 75
Machinery		8,991 46		5,253 00		2,327 98	73,419 45
Mineral water		23,381 17			9,972 39		522,840 69
Music, musical strings and instruments	2,466 62	4,451 26	8,615 62	21,475 57	32,815 71	12,508 41	98,280 53
Optical goods				28,971 03			29,193 56
Oil paintings and chromos		4,539 37	161,097 59				211,427 94
Platina wire and plates							22,542 05
Prunes, dried fruits, nuts, land produce, &c	15,076 85	100,934 32	6,410 09	220,418 04		41,011 73	636,743 18
Pins and needles							27,097 28
Rags	50,560 26						83,575 01

Railway rails, old and new, iron ware, cutlery, &c	11,970 73				34,264 62	1,063 97	4,082,840 36
Sardines and herrings							12,384 83
Seeds, plants, &c		152 32			62,750 07	1,174 30	77,874 90
Slates and slate pencils				12,363 92	27,696 98		40,060 90
Silk, silk goods, velvets, ribbons, and braids, &c	298,855 08						4,568,054 67
Smokers' articles, snuff, cigars, and tobacco	26,086 82	34,775 67			27,849 25		90,738 08
Soaps and perfumery							9,499 09
Statuary and sculpture			17,720 16				17,720 16
Sundries	44,840 30	2,914 02	23,577 88	77,512 90	1,906 16	24,797 84	373,952 41
Steel, manufactured, and Bessemer		1,482 83	7,859 92				236,743 30
Tapestry and embroidery ware, laces	1,442 20		1,260 71	83,286 77		2,174 35	97,060 33
Wine, brandy, beer, and liquor	208,829 72	514,883 75		47,615 64	2,269 09	4,095 78	999,115 72
Watches, clocks, and watchmen's detectors	4,834 90	2,989 38				5,844 20	15,388 89
Total	2,891,093 10	1,724,421 43	491,341 51	3,334,713 75	2,077,689 83	773,164 51	30,986,648 50
Total for preceding year	2,003,183 00	1,342,822 15	602,901 62	2,499,911 76	1,810,156 92	847,091 03	25,256,954 93
Increase		381,599 28		834,801 99	267,532 91		5,729,693 57
Decrease	12,094 90		111,560 11			73,926 52	

FERDINAND VOGELER,
United States Consul-General.

FRANKFORT-ON-THE-MAIN, *September* 30, 1882.

Exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, and the consulates subordinate thereto, during the year ended December 31, 1882.

Articles.	Aix-la-Chapelle.	Barmen.	Cologne.	Crefeld.	Dusseldorf.	Frankfort.	Kehl.*
Baskets and basket ware							
Brushes and hair pencils	$154 76						
Bronze powder and leaf metal							
Beads and bead ware							
Books, stationery, photographs, and paperware	24,694 86		$6,980 80	$79,353 29	$99 58	$79,928 87	$18,008 59
Buttons and button stuffs		$234,051 68		10,747 23	15,610 64		
Clay (for pipes)						56,346 54	
China, glass, porcelain, and earthen ware	167,333 03		11,743 27			44,839 61	1,764 73
Cotton dress goods, velvets, and furnishings							
Corsets							
Cloth	1,138,894 54				18,479 40		
Cologne water			15,858 03				
Decalcomania							
Dyes, drugs, chemicals, &c	218 81	228,302 34	209,156 00	62,786 05	31,647 17	578,614 40	35,072 05
Empty petroleum barrels							
Fancy goods and toys	6,857 96	100,163 85				165,463 80	23,741 03
Fancy paper							
Glass plate, window and mirror glass							
Glassware (hollow), watch crystals, spectacle glasses, &c						17,626 44	23,493 80
Gold, silver, and metal paper							
Gas-burners, lava gas-tips, brass lamps							
Grape-sugar and sirup			37,590 65				
Hatters' fur						150,107 72	
Hair, prepared and raw						60,670 59	17,806 95
Hares' hair						119,917 12	
Instruments			8,819 64			3,249 25	
Jewelry and precious stones						1,815 56	
Kid gloves	112,593 02						
Lead pencils and lead for pencils							
Leather, hides, and skins			134,595 99			816,034 13	384,007 13
Leather goods						52,749 39	
Lead, zinc, and spelter	254,759 04					40,735 28	
Leonic ware							
Linen, woolen, and cotton goods	5,154 30	1,131,184 94		22,034 00	458,037 94	350,898 07	23,400 15
Lithographic stones and materials							
Machinery				9,514 82	8,398 39	19,863 26	10,680 00
Mineral water			352,070 44		11,213 38	100,878 55	
Music, musical strings, and instruments						16,330 96	
Optical goods							
Oil paintings and chromos				4,023 98	43,125 84	2,749 97	
Platina wire and plates						19,955 70	
Prunes, dried fruits, nuts, land produce, &c		15,175 10				146,101 90	37,621 20
Pins and needles	30,923 66						
Rags						44,810 01	

Railway rails, old and new, iron ware, cutlery, &c	88,196 47	1,190,794 21	400,241 37	1,075,624 30	726,767 32	2,751 95	
Sardines and herrings						4,742 33	
Seeds, plants, &c	117 55					12,795 81	
Slates and slate pencils							
Silk, silk goods, velvets, ribbons and braids, &c	2,048 78	2,323,137 90	553,007 65	4,178,768 78	17,944 46	7,355 43	146,143 72
Smokers' articles, snuff, cigars, and tobacco						2,751 14	3,066 55
Soaps and perfumery						8,809 45	
Statuary and sculpture							
Sundries	2,666 66	15,428 48	44,956 67	4,754 72	84,826 97	12,213 76	13,026 80
Steel (manufactured) and Bessemer	76 19		306,720 84			1,435 06	
Tapestry and embroidery ware, laces						14,650 68	
Wine, brandy, beer, and liquor	575 07		91,580 08	18,871 89	1,611 74	97,195 91	3,067 92
Watches, clocks, and watchmen's detectors						781 16	642 25
Total	1,794,264 65	5,238,288 50	2,173,321 43	5,466,479 06	1,417,762 83	3,055,170 70	740,542 87
Total for preceding year	1,560,845 54	3,914,647 15	2,334,374 09	4,317,719 33	1,209,697 54	2,751,533 74	
Increase	233,419 11	1,323,591 35		1,148,759 73	208,065 29	303,636 96	
Decrease			161,052 66				

* From July 18, 1882, to December 31, 1882.

Exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, and the consulates subordinate thereto, during the year ended December 31, 1882—Continued.

Articles.	Mannheim.	Mayence.	Munich.	Nuremberg.	Sonneberg.	Stuttgart.	Total.
Baskets and basket ware				$213,376 39	$8,763 05		$222,139 44
Brushes and hair pencils				34,319 73			34,474 49
Bronze powder and leaf metal			$17,384 12	441,520 33			458,904 45
Beads and bead ware				59,634 50			59,634 50
Books, stationery, photographs, and paperware	$64,267 53	$332 18	45,149 97			$14,239 15	333,054 82
Buttons and button stuffs				17,959 00			278,368 55
Clay (for pipes)				8,944 10			65,290 64
China, glass, porcelain, and earthen ware	2,089 67	2,515 09	7,188 99	45,471 11	710,104 65	19,788 96	1,012,839 11
Cotton dress goods, velvets, and furnishings	96,943 00						96,943 00
Corsets						452,129 26	452,129 26
Cloth							1,157,373 94
Cologne water							15,858 03
Decalcomania				70,438 04			70,438 04
Dyes, drugs, chemicals, &c	1,423,036 70	206,772 92	9,609 18	67,235 16	42,539 67	119,397 87	3,014,388 32
Empty petroleum barrels	28,417 05						28,417 05
Fancy goods and toys				291,247 06	603,708 46	2,052 10	1,193,234 26
Fancy paper				106,810 98			106,810 98
Glass plate, window and mirror glass	4,762 08			1,234,316 16			1,239,078 24
Glassware (hollow), watch crystals, spectacle glasses, &c	29,201 77						69,322 01
Gold, silver, and metal paper			43,255 95				43,255 95
Gas-burners, lava gas-tips, brass lamps				19,485 21	5,551 00		25,036 21
Grape-sugar and sirup							37,590 65
Hatters' fur							150,107 72
Hair, prepared and raw	688 20	5,975 76					85,141 50
Hares' hair							119,917 12
Instruments			2,875 08	35,774 26		1,116 83	51,835 06
Jewelry and precious stones	16,207 10	442,297 63	4,197 61	13,985 43	14,094 26	19,984 09	512,581 68
Kid gloves			107,269 54		1,358 73		221,221 29
Lead pencils and lead for pencils				136,131 65			136,131 65
Leather, hides, and skins	564,885 75	333,151 48	13,682 17			11,557 84	2,257,914 49
Leather goods							52,749 39
Lead, zinc, and spelter							295,494 32
Leonic ware				47,541 96			47,541 96
Linen, woolen, and cotton goods	18,431 65			40,623 04	473,921 17	50,963 07	2,574,648 33
Lithographic stones and materials				108,790 90			108,790 90
Machinery	11,050 38	7,706 18				2,428 90	69,641 93
Mineral water		19,745 35			3,604 29		487,512 01
Music, musical strings, and instruments	2,705 87	5,501 69	8,243 87	19,144 57	21,714 80	14,283 59	87,925 35
Optical goods				26,932 28			26,932 28
Oil paintings and chromos		6,455 27	149,288 83				205,643 89
Platina wire and plates							19,955 70
Prunes, dried fruits, nuts, land produce, &c	33,284 60	246,120 18	5,676 00	988,170 84		45,999 54	1,468,104 36
Pins and needles							30,970 06
Rugs	13,047 50						87,898 40

Railway rails, old and new, iron ware, cutlery &c					34,967 80	2,604 89	3,471,948 31
Sardines and herrings							4,742 33
Seeds, plants, &c		271 32	5,236 81		58,474 11	1,262 64	78,158 24
Slates and slate pencils				11,457 59	21,930 27		33,387 86
Silk, silk goods, velvets, ribbons and braids, &c	239,645 20						7,468,051 87
Smokers' articles, snuffs, cigars, and tobacco	22,309 63	34,501 99			24,173 24		86,802 55
Soaps and perfumery							8,809 45
Statuary and sculpture			19,599 26				19,599 26
Sundries	10,324 42	2,542 04	33,929 91	84,783 70	1,061 28	23,019 16	335,534 57
Steel (manufactured) and Bessemer		1,989 83	11,465 39				321,087 31
Tapestry and embroidery ware, laces	1,443 20		888 97	80,524 52	1,014 45	3,783 46	102,304 28
Wine, brandy, beer, and liquor	194,005 35	564,998 57		41,172 81	1,075 50	4,020 24	1,018,175 08
Watches, clocks, and watchmen's detectors	2,767 40					6,775 44	10,966 25
Total	2,809,513 10	1,880,886 48	484,941 65	4,195,797 32	2,028,056 73	797,407 03	32,082,382 35
Total for preceding year	2,824,603 10	1,444,759 77	533,773 77	2,660,073,26	1,867,310 74	762,362 77	26,181,700 80
Increase		436,126 71		1,535,724 06	160,745 99	35,044 26	5,900,681 55
Decrease	15,090 00		48,832 12				

FERDINAND VOGELER,
United States Consul-General.

FRANKFORT-ON-THE-MAIN, *December* 31, 1882.

EXPORTS FROM CHEMNITZ.

REPORT BY CONSUL FLINN.

Statement of exports to the United States of America from the consular district of Chemnitz, Saxony, for the year ending December 31, 1882.

Articles.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Total.
Chemicals	$5,187 17	$7,357 94	$8,412 30	$8,189 68	$29,147 09
Cotton yarn	4,958 91	4,305 59	2,575 93	6,560 96	18,401 39
Damasks	35,773 14	15,507 88	77,417 31	48,455 47	177,153 80
Dress goods	529,534 18	122,176 40	413,521 90	139,727 02	1,204,959 50
trimmings	404,906 94	190,651 05	36,665 55	.....	632,223 54
Embroideries	120,455 83	45,530 13	89,277 45	196,719 12	451,982 53
Fancy goods	7,481 26	15,502 31	28,589 88	1,514 16	53,087 61
Gloves, cotton	416,245 95	219,520 85	263,196 81	378,968 63	1,277,932 24
kid	56,462 54	62,858 00	79,209 82	48,337 51	246,867 87
silk	54,884 45	12,871 90	27,420 44	53,709 24	148,886 03
wool	642 85	62,228 36	112,501 25	12,780 19	188,152 65
Hosiery, cotton	1,515,156 69	685,078 26	720,891 51	1,330,256 63	4,251,383 09
silk	9,961 74	13,023 70	15,679 56	19,443 68	58,108 68
wool	1,459 74	7,173 65	33,324 24	1,549 80	43,507 43
Laces	84,442 03	27,623 98	26,283 24	13,436 13	151,785 38
Machinery	4,634 41	1,443 59	5,313 02	2,511 15	13,902 17
Miscellaneous	1,158 60	147,022 11	10,900 32	21,634 24	180,715 27
Musical goods	153,918 05	175,155 28	226,658 55	122,051 15	677,783 03
Toys	1,355 44	25,903 35	7,607 61	136 66	35,003 06
Total for 1882	3,408,619 92	1,840,934 33	2,185,446 69	2,405,981 42	9,840,982 36
Total for 1881	2,934,879 37	1,601,391 35	2,739,949 82	2,443,143 06	9,719,363 60
Increase	473,740 55	239,542 98	.....	.....	121,618 76
Decrease	.....	.....	554,503 13	37,161 64	.....

The exportations of manufactured goods from Chemnitz and its environs show a large increase over any previous year. The decrease which is apparent in the third and fourth quarters is accounted for by the fact that six months ago a consulate was created at Annaberg, which up to that time was an agency attached to this district. The new consular district not only embraces the places formerly tributary to the agency, but also the large and prosperous manufacturing towns of Markneukirchen, Brunndoebra, Johanngeorgenstadt, Eibenstock, and Klingenthal. If the exportations from the latter places were included in the above the increase over 1881 would be very great. The decrease is principally in dress trimmings, fancy goods, musical goods, and toys.

JOHN J. FLINN,
Consul.

EXPORT FROM KEHL.

REPORT BY CONSUL BALLOW.

Of late the exports to the United States from this consular district have increased considerably. All of the articles heretofore exported—with perhaps one exception—are participating in this improvement. Among the principal articles of export are hides and leather, silk plush, silk ribbons, drugs and chemicals, printed cottons, books, engravings, watch and spectacle glasses, pasteboard goods, hair nets, papier maché articles, clocks, porcelain and stone ware, snuff, straw hats, wire textures, wine, beer and brandy, terrines de foie gras (goose-liver pies).

Hides and leather head this list as the chief articles of export. For-

merly the exportation of leather was much greater than that of hides, at present the contrary may be stated, although the exportation of leather is gradually increasing; both articles, however, are largely exported, as the Alsatian tanners enjoy an enviable reputation for producing the finest calfskins and moroccos.

Silk plush is extensively manufactured in this district at Saargemünd, Lorraine, Guebwiller, Alsace, and Sackingen, Baden; the exportation of this article is large, and steadily increasing; one reason for this is that it is very fashionable for garments and trimmings at present; the superior quality and colors are also in its favor, and tend largely to increase its sale.

Silk and silk and cotton ribbons are manufactured by the same houses, in variety of designs, colors, &c.; these goods are not excelled; exports are larger from month to month.

The only article of export which indicates a decrease is printed cottons. These were formerly exported solely for patterns and colors, which were exceptionally fine, and enjoyed a reputation in this branch second to none. I am informed that American manufacturers are now producing goods equaling them in quality and general excellence, which accounts for the decrease in exportation.

The chemicals exported come mostly from Mülhausen, Alsace. These largely consist of aniline colors for dyeing purposes; at one time the exportation of these goods increased much more rapidly than at present; now superior inducements are offered by other sections in prices, &c.; still, they show a slight increase.

The manufacture of hair nets is a comparatively new industry in Alsace, and the importation of these articles to the United States is largely increasing. They are made in the small villages of Alsace, from human hair, and the work is done entirely by hand, requiring much practice and dexterity. They are sold largely in France and Central Europe.

Hops are exported from here every year in greater or lesser quantities, according to the demand, price, quality, &c. This year a not very extensive crop was gathered here, but of a very fine quality, and as the hop crop of England is almost a total failure, they are bringing a good price. Shipments have lately been made to the United States.

Pasteboard goods are largely manufactured in Baden and extensively exported to the United States; they consist chiefly of boxes for druggists' and pharmaceutists' use; their shipments are increasing every month; the cheapness of materials and labor has had much to do with this, as the goods are not superior to those manufactured in the United States.

Papier maché articles, such as buttons, ornaments, &c., are manufactured in Lorraine. They enjoy a very extensive sale at home and throughout Central Europe. The exports to the United States are not very large, but show an increase from year to year.

Clocks are quite extensively manufactured in the Black Forest. They are chiefly valued for their automatic figures, which are sometimes very curious and complicated. The export to the United States is not large.

The exportation of books from this district is quite large and increasing. These are mostly religious works. There are two extensive houses in Baden which furnish these works.

Engravings are also exported, but not largely.

Straw hats are quite largely sold from here. Last year the exportation of this class of goods from Alsace was double that of the preceding year.

But a small quantity of wine is *directly* exported from this district to the United States. The wines of Upper Alsace are more like the German than French wines; they have a fine flavor and bear a strong resem-

blance to the Rhenish wines or hocks. Before the annexation of Alsace to the German Empire these wines were sold with German labels for genuine Rhenish, to the detriment of the producers; this is still the case. Large quantities are taken from here to Rhenish Bavaria each year, bottled, labeled, and sold from there as the genuine product of that section, bringing of course a much higher price. These wines are exported under the name of Rhenish wines, which accounts for the fact that Alsatian wines are so little known in foreign countries. The wine exported direct from here is sold chiefly to the former residents of this district. The wines of Lower Alsace are lighter in color than those of Upper Alsace and are considered more wholesome; they are mostly white wines of a very delicate flavor.

There are about 100,000 acres of vineyards in Alsace, yielding about 50,000,000 gallons of wine.

Brandy made from potatoes is produced here and some of it finds its way to the United States.

The kirschenwasser of the Black Forest is the finest of Germany. Considerable of this is made in Alsace and sold as the product of the Forest; the difference, however, is said to be slight.

It is perhaps worthy of mention that the first shipment of sauerkraut from this district was made a few weeks since; it has apparently been well received in the United States, as larger orders have resulted.

One of the staples of Strassburg, terrines de foie gras (goose-liver pies), was largely exported to the United States last year, the exportation exceeding that of the year 1880, and the present year bids fair to exceed any preceding year.

The articles which I have noticed above, constitute the principal products of exportation. Other articles are exported in small quantities, but are not worthy of special mention.

I submit the following statement of the different articles exported from the consular district to the United States during the year ending September 30, 1882, with their respective values:

Books, stationery, engravings	$30,796 94
Clocks	3,117 75
Cotton goods, textures, &c	34,368 40
Drugs and chemicals	73,962 65
Terrines de foie gras	9,730 00
Watch and spectacle glasses	49,697 00
Hides and leather	687,301 3[illegible]
Hair nets	80,596 75
Hops	17,775 00
Pasteboard goods	13,457 40
Fancy paper goods	53,716 47
Porcelain and stoneware	2,833 43
Silk goods, plushes, ribbons, &c	375,507 50
Snuff	5,866 20
Straw hats	6,450 50
Wine, beer, and brandy	5,569 00
Wire textures	3,068 60
Sundries	3,712 20
Total	1,457,522 17
Total for the year ending September 30, 1881	1,143,184 84
Showing an increase for the year ending September 30, 1882, of	314,337 33

FRANK N. BALLOW,
Consul.

UNITED STATES CONSULATE,
Kehl, November 21, 1882.

EXPORTS FROM LEIPSIC.

REPORT BY CONSUL MONTGOMERY.

In presenting a brief annual report of the condition of business affairs in this consular district, so far at least as they relate to the special industries of the country embraced within its limits, it gives me pleasure to state, at the outset, that nothing has occurred during the year just closed to interrupt the tide of prosperity which seems to have set in.

Indeed, a review of the past few years fully justifies the statement that all industrial enterprises have been so steadily and legitimately maintained, with few and trifling fluctuations to produce uneasiness, that they are now flourishing upon a sounder basis and deriving additional strength from a feeling of confidence in the continued stability of the market.

Both merchants and manufacturers concur in saying that a very healthy condition prevails in all branches of trade and commerce, and that whilst the past year has been a satisfactory one in point of profit, they have every reason to anticipate increased results from the season now opening. This gratifying state of affairs in the business world, not only in Saxony but throughout Germany, is, in a great measure, attributable to the remarkable, almost unparalleled, prosperity which exists in America. Our country has become such a steady, reliable, and profitable customer of Europe, and, in return, furnishes such constant supplies of its own inexhaustible products, that foreign merchants invariably base their hopes or fears upon the actual condition and tendency of the American markets.

In this particular district, however, it must be added that the extent of trade is more or less influenced by the nature of the seasons. This will be readily understood by a simple reference to the principal articles of manufacture and export, viz, furs, gloves, and woolen goods. Consequently, whilst a mild season witnesses a comparatively sluggish demand for these articles, a cold one, on the contrary, arouses a most active and spirited trade in them; hence the ever-constant prayer of Saxon merchants for "a sharp and long winter!"

The best and most practical evidence of the soundness and stability of trade in this district is afforded in the tabular statement or digest of invoice book recently forwarded to the State Department with the returns for the third quarter of 1882.

From this it will be seen that the value of declared exports from this consular district for the year ending September 30, 1882, amounted to $3,396,332.18, showing the handsome increase of $984,023.79 over the aggregate for the preceding year, as follows, viz:

Total value of exports for year ending September 30, 1882	$3,396,332 18
Total value of exports for year ending September 30, 1881	2,412,308 39
Increase	984,023 79

This very encouraging and significant increase is principally due to an unusually active trade in furs and gloves; the former being $226,676 and the latter $156,779 over and above the aggregate in the preceding report; and further, in woolen goods, $400,000.

Taken in connection with the fact that nearly all the articles enumer-

ated in the tabular statement referred to present a larger aggregate, it is impossible to do otherwise than draw a favorable conclusion as to the buoyant condition of trade in this particular section.

A singular and somewhat novel feature of the recent "Messe," known as the "Michaelmas Fair" (which commenced in this city September 18th ult., and continued during four weeks), was the unusual demand, especially from American buyers, of articles of luxury of all varieties and description.

This departure is evidence of the introduction of a higher order of industry, and one which has already necessitated the employment of additional capital and labor.

Although this fair is of secondary importance in comparison with the "Jubilate," or "Easter Messe," it nevertheless served to confirm the stability of all branches of industry in this and the adjoining districts.

Indeed, these semi-annual "Messes" may be regarded as commercial barometers, from which even a stranger can form a correct opinion as to the general condition of the market.

A very encouraging feature is visible in the fact that modern enterprise is forcing its way gradually, yet surely, into all departments of industry, and undermining a system of operative work to all appearances coeval with the time succeeding the Thirty Years' War.

Great changes and improvements in machinery are taking place, the result of which is to greatly increase the stock of goods over that supplied by the old and time-honored ways of manufacturing. New and tried inventions are being introduced, in spite of national prejudice against "foreign machines and implements," and the benefits always derived furnish the strongest arguments in favor of a more general employment of them.

Articles of American manufacture are becoming more and more popular. They are infinitely far superior to those of the German model, not only in finish, but in design and adaptability, and I have not a doubt that if they could be supplied at somewhat reduced rates over those now charged, they would find a very general sale throughout Germany. Whilst referring to this subject of the introduction into this country of American products and manufactures, I must repeat the observation made in a former report and now confirmed by experience, that the trade and commerce of America with Germany would be considerably enhanced by the adoption of a more liberal and extended system of advertising in the continental papers. The frequent demand upon this consulate for detailed information respecting the price, quality, and character of all kinds of American wares and products convinces me of the great practical utility and benefit of employing this method of giving widespread publicity to our home productions. This and the employment of responsible agents in the principal centers of business could not fail to popularize all descriptions of American industry and create for them a more active demand.

I am pleased to announce a most gratifying increase during the past year in the business of the Gera agency.

The annual report of the consular agent, Neuer, recently submitted, presents a most encouraging condition and outlook, the value of declared exports from Gera to the United States for the year ending September 30, 1882, being $262,160.27 over and above that of the preceding year. In this report Mr. Neuer states: "Industrial establishments which for a time had rested from work, resumed it. Many new factories have been erected, others were enlarged and provided with the latest improvements of modern requirements. * * * In general, the last

year proved to be a satisfactory business year, peace was not threatened, and apprehensions as to a scanty yield of the crops turned out in the end to be unfounded. The working people had not to complain of a lack of labor, and if wages did not get higher owing to the great competition, yet the workman was tolerably well situated, because of his having been employed the full time and by working at articles yielding a better pay."

Upon the subject of general business transacted, the agent remarks: "The manufacturers of worsted dress goods have successfully continued their trials to make other and new kinds of stuffs of a great variety in tasteful and solid articles for ladies' dresses and cloaks.

"The great progress made in mechanical weaving and present fashion so favorable to the goods made in this district have served to compete effectually with foreign manufactures both in cheap, solid qualities and in finest goods of great perfection. This accounts partly for the fact that the liking of the public for foreign, especially French, goods has greatly diminished, much more so as the latter by the German rates of duties are nearly excluded from the market here."

In speaking of the constant work of dyeing, finishing establishments, Mr. Neuer remarks: "As in former years, black color remains in greatest demand, though large orders for other colors were received. Owing to the great success that German chemists have recently obtained in the process of making tar colors, the dye-works had at their disposal a number of new dyestuffs, which greatly contrasted by their genuineness with tar colors hitherto used."

The agent further alludes to the "horse-hair spinning in high terms, and also upon the manufacture of accordeons, a specialty in his district. Upon this subject he says that whilst there was a very active demand for these instruments in North and South America, the European trade was almost paralyzed by the high duties imposed by Russia, France, Italy, and Spain. Business in tanned leather he reports as unsatisfactory, but the manufacture of leather gloves, also a specialty in his district, was more active than usual, and, owing to recent improvements, a state of perfection in this industry has been reached hitherto unknown.

Upon the subject of the prospects of business in his subdistrict, Mr. Neuer states: "The commerce between the United States and this district maintains a very healthy and prosperous condition, and, according to the views of the principal shippers, the outlook for an increasing activity is most encouraging."

In relation to local matters, I am pleased to report, in conclusion, a continuation of the activity which prevailed throughout the year 1881.

The laying out and improving of many new streets in different sections of the city, and the building of a large number of houses, both public and private, is still giving active employment to regiments of mechanics and laborers, and serves to demonstrate, moreover, that the spirit of enterprise in this old Saxon metropolis has received fresh impulse from modern energy and example.

Although wages are very small, ridiculously so in comparison with our American standard, still they are accepted with apparent gratitude as necessary barriers against want, and the thought of striking for an advance is never entertained for a moment, as the laborer in this country fully realizes the fact that the only result would be compulsory labor or starvation.

J. E. MONTGOMERY,
Consul.

TRADE BETWEEN SONNEBERG AND THE UNITED STATES.

REPORT BY CONSUL WHARTON.

As will be seen from the appended statement, the export trade from this district to the United States is ever on the increase. The total amount for the year ending September 30, 1881, was $1,810,156.92: that for the year ending September 30, 1882, $2,077,689.83, showing an increase during the present over the past year of $267,532.91. This has been caused by the great prosperity existing in the United States, and the increased facilities here for meeting the demand.

Much interest is still felt on the subject of toy coloring, and a large congress has recently been held in Nüremburg on the subject, which was attended by a deputation from the Chamber of Commerce in Sonneberg. The whole matter is still undergoing investigation, and it is hoped that a satisfactory conclusion will soon be reached.

A congress of the German foresters, containing about three hundred members, has recently been held in Coburg, but nothing new, so far as I could learn, was developed. Much attention has been given to this subject for the past three centuries in Germany, and with the most satisfactory results. It would be well, I think, for the United States to adopt similar methods for preserving the forests, particularly of our older States. Colleges here are organized for the express purpose of training men for this important work.

But few goods are imported into this district from the United States direct, though large quantities are received through Hamburg houses. The principal American goods used here are stoves, sewing-machines, agricultural implements, and canned goods. American stoves and sewing-machines are imitated all over Germany. Here in Coburg nearly all prefer the "Amerikanischer Ofen," but on inquiry I find they are all made at Nüremburg. Not much American meat is consumed here, as hogs are raised in large numbers in Thuringia, and many are imported from Bavaria and Hungary.

I append herewith a statement of declared exports from the district of Sonneberg to the United States during the year ending September 30, 1882.

MORTON B. WHARTON,
Consul.

UNITED STATES CONSULATE,
Sonneberg, September 30, 1882.

Statement showing the value of declared exports from the consular district of Sonneberg to the United States during the year ending September 30, 1882.

Articles.	Quarter ending—				Total for the year.
	December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	
Baskets	$500 06	$1,890 31	$861 61	$4,194 17	$7,446 15
Brass lamps	.....	2,279 45	1,501 60	1,352 19	5,133 24
China goods	71,915 81	62,985 87	187,538 62	284,836 84	607,277 14
Dolls and other toys	58,308 71	41,828 15	204,190 01	257,732 23	562,059 10
Drugs	2,962 97	847 12	1,179 81	1,242 39	6,232 29
Fancy glassware	2,975 21	1,498 95	.....	.....	4,474 16
Glassware	18,059 69	25,457 37	22,995 42	38,876 21	105,388 69
Guns	7,366 23	4,176 68	6,769 01	7,618 57	25,930 49
Hardware	.....	3,798 95	1,759 24	2,775 94	8,334 13
Hosiery (cotton)	125,278 40	136,659 48	123,823 27	97,244 13	477,005 28
Kid gloves	474 86	854 00	.....	.....	1,328 86
Leather	9,605 24	.....	.....	.....	9,605 24
Liquors	1,193 59	.....	1,075 50	.....	2,269 09
Mineral water	6,368 10	.....	.....	3,604 29	9,972 39
Miscellaneous	203 58	153 13	.....	263 75	620 46
Musical instruments	15,094 14	3,654 36	5,301 35	8,765 86	32,815 71
Paints	5,942 63	5,053 08	14,352 99	10,495 06	35,873 76
Papier maché and fancy goods	9,283 92	5,968 59	13,633 91	21,279 11	50,165 53
Raw barytes	.....	.....	.....	6,176 12	6,176 12
Seeds, plants, &c	39,469 73	15,876 51	3,432 87	3,970 96	62,750 07
Slate pencils	8,315 70	3,554 85	8,828 90	9,697 53	27,696 98
Smokers' articles	9,738 70	3,681 29	7,860 34	8,568 92	27,849 25
Tulle	.....	1,014 45	.....	.....	1,014 45
Wafers	271 25	.....	.....	.....	271 25
Total	391,328 52	315,262 59	605,104 45	765,994 27	2,077,689 83
Previous year	334,174 70	263,763 20	520,004 83	692,214 19	1,810,156 92
Increase	57,153 82	51,499 39	85,099 62	73,780 08	267,532 91

EXPORTS FROM FRANCE TO THE UNITED STATES.

SUMMARY BY CONSUL-GENERAL WALKER OF PARIS OF REPORTS OF UNITED STATES CONSULAR OFFICERS IN FRANCE.

The following presents a review of the reports upon commerce, navigation, and matters of general interest from United States consular officers which have passed under my observation during the past year:

BORDEAUX.

Consul George W. Roosevelt reports the value of declared exports to the United States for the year ending September 30, 1882, to be $5,622,881.52, and for the preceding year $4,325,630.63, showing an increase for 1882 of $1,297,250.89.

The total value of imports of "general commerce" for the year 1881 was $70,014,786; of "special commerce," $59,748,263; and the amount of duties collected, $5,634,215.

The total value of exports for the same period was, for "general commerce," $69,903,069, and for "special commerce," $61,929,567.

The result of the vintage in this district for the year 1882 was 24,528,504 gallons of wine, as compared with 28,072,000 gallons in 1881, a decrease of 3,543,496 gallons for 1882.

HAVRE.

Consul John B. Glover reports the value of declared exports to the United States for the year ended September 30, 1882, to be $1,501,723.50, and for the preceding year $1,343,867.89, an increase for 1882 of $157,855.61. The port of Havre, one of the most important on the continent, Marseilles alone of the seaport cities of France excepted, is growing

rapidly in population and wealth, while foreign trade is steadily increasing, its docks are being extensively improved, the port is now lighted by electricity, and vessels can safely enter by night as well as by day. Cost of living is said to be higher than in other cities of France.

The total value of imports of "general commerce" for 1881 was $198,987,379, of "special commerce" $130,471,537, and the amount of duties collected $7,214,260.

The total value of exports for the same period was, for "general commerce," $177,597,854, and for "special commerce," $125,900,866.

The consul calls special attention to the falling off in our carrying trade, and suggests that our laws relating thereto ought to be speedily amended by legislation. He says twenty years ago our vessels had more than 65 per cent. of the whole trade to and from American ports, while our share at the present time scarcely reaches 15 per cent., and he predicts, if the present rate of decline continues, that our shipping interests will soon be a thing of the past.

American horses for the French cavalry, which were some years ago introduced into France by Consul Bridgland, are no longer in demand, owing to their cost in the United States, which, added to cost of transportation, make them too expensive, although they are perhaps better calculated for this service than the heavier and less active French animals.

American pork.—On account of the prohibition of, in France, the consul recommends, as a protective measure, a rigid inspection of French wines entering the United States, and expresses the hope that for the present the tariff on silks and wines may not be reduced.

LA ROCHELLE.

Consul George Gifford reports that the imports from the United States to his consular district for the years ending June 30 and September 30, 1882, have been confined to cereals, wood and timber, coffee, and oak staves, of which cereals amounted to 8,253 tons, and wood and timber to 4,388 tons, coffee 15 tons, and oak staves 14 tons, in all 12,670 tons. The above does not include the small amount of indirect importations coming to this port of France.

American pork formerly found a good market here, but if any arrives at present it is by way of England or other countries, and in small shipments which do not effect prices. Where formerly the industry of fattening swine suffered greatly from American competition, those engaged in the business are now enjoying high prices. The present season, it may be stated, has been unfavorable for the production of food for the swine, and consequently a demand for cheap American pork is likely to arise.

Porcelain trade of *Limoges* with the United States assumes a greater importance from year to year, the United States, it is estimated, importing one-half of this ware exported to foreign countries.

Brandy.—The diminution in the quantity of this article shipped to the United States is very marked, owing to the uncertainty of prices attending the approach of the vintage, and also to the feeling of distrust gradually growing among American consumers as to the purity of the article now placed upon the market.

Imports.—The imports of iron and coal, the former from Spain, and the latter from England, have greatly increased, and thereby added to the business activity of La Rochelle; this is due principally to the railroad company whose line connects that city with the interior, and has made its rates of transportation of such heavy articles so favorable to

this port, that their importation is rendered not only possible but profitable. Coal-tar pitch for the manufacture of "patent fuel" is also largely imported from England, and the demand for it is increasing.

Exports.—Brandy continues to be the chief article of export from the Chareate, but as many shipments of this article are made by way of Havre and Bordeaux, they are consequently assigned by the customs house statistics to the commercial movements of those ports.

Shipbuilding.—The bounties now offered by the French Government for the construction and sailing of vessels engaged in foreign trade, have little effect in reviving ship-building. The steamers hailing from this port and those in process of construction, are built on the Tyne; the owners finding it to their profit to forego the claim to a bounty for building, and to avail themselves of the cheaper rate of construction in England. Once under the French flag, however, these foreign built ships are entitled to the bounty for navigation.

Wine.—The vintage in localities, mostly near the coast, where the vines have not disappeared has been quite abundant, but of an inferior quality, having only about 6° alcoholic strength, and will nearly all be made into brandy; a certain part will be sold as wine, after being mingled in a larger measure even than heretofore, with the stronger or more concentrated products of Southern Europe, and its taste otherwise improved.

Phylloxera and American Vines.—The phylloxera has made new progress during the present year, and the value of land has consequently declined 60 per cent on account of this prevailing malady. The introduction of American vines on which to graft the French plants, has led several proprietors to experiment with the former for their own grapes, and the result has in every case, as far as known proved satisfactory.

The value of declared exports to the United States for the year ending September 30, 1882, amounted to $1,897,719.51, and for the preceding year to $1,877,494.47, an increase for 1882 of $20,225.04.

LYONS.

Mr. Benjamin J. Peixotto, consul at Lyons, gives the declared exports from his consular district to the United States for the year ending December 31, 1882, as amounting in value to $13,713,247.96, and in 1881, to $11,942,209.46, an increase for 1882 of $1,771,038.50. This increase was principally confined to silk piece goods, raw silk, pierced cocoons, waste silk, combed and spun silk, organzine silk, church ornaments and military trimmings, wines and liquors, &c.

Over sixty millions of dollars is the export of Lyons in silk goods alone for 1882, of which amount thirteen and one-half millions was shipped to the United States. Notwithstanding the increase of exports over 1881, it is claimed by good authorities that 1882 has been a poor year. Therefore it is not in the amount of the exports, but in the prices realized, must be sought the true key to the commercial situation of the Lyons trade.

The vintage of this consular district for the year 1882 produced 88,473,330 gallons of wine; the district including the Departments of Ain, Ardèche, Côte d'Or, Doubs, Drôme, Isère, Jura, H^te^, Loire, Nièvre, Puy de Dôme, Rhône, Saône, and Loire and Savoy.

MARSEILLES.

The declared exports from this consular district for the quarter ending September 30, 1882, is reported by consul Horace A. Taylor as amount-

ing to $3,399,125.37, and for the preceding year to $2,396,637.34, an increase for 1882 of $1,002,488.03.

The consul reports the trade of that city as unsatisfactory for the year 1881, as compared with 1880 and previous years, owing, among other causes, to the uncertainty of the effect on trade of the new French tariff then in preparation; the large exportation of wheat from the United States to northern ports of France, formerly receiving their supplies from Marseilles, has occasioned a large decrease in the transportation by rail of grains to the interior of France; and the competition of other Mediterranean ports being greatly favored by the high prices in force at Marseilles for the landing, lading, and transportation by land, is beginning to divert the current of transit, at all times one of the prominent features of the trade of that city.

The chamber of commerce is making active exertions to bring about a reduction in the charges attending the handling of merchandise at that port. Steam vessels are to supersede sail, but it is thought in commercial circles that the steamships attached to the Marseilles lines are of larger tonnage than required by the necessities of trade. Statistics do not seem to show that the French law passed in favor of shipping interests in France, has been conducive to the commercial interests of Marseilles.

The project of building new docks in the southern part of the city, which was rejected by the Chambers, has not been dropped, and may shortly be submitted again to the Chamber of Deputies. In the meanwhile the docks at the north end are nearly completed and the Chamber of Commerce propose to establish the latest and best apparatus, some of the members having gone on a special mission to the most important ports of Europe in order to make themselves fully conversant with the subject. On the 1st December, 1881, a new light-house was inaugurated on the rock of Planier, some seven or eight miles distant from Marseilles. The light is electric, revolving; three white flashes followed by a red one, and can be seen from a distance of 48 miles. It is placed at an altitude of 207 feet above the level of high-water. The consul states that great expectations are built upon importations of wheat from the East Indies. This trade, he says, but recently engaged in, is bidding fair to come into successful competition with American wheat. The importation from the East Indies, which barely amounted to 35,000 tons in 1880, reached in 1881, 121,409 tons, an increase of 86,409 tons, and which could be sold on the market at 25 cents per bushel less than American wheat.

The sugar trade.—The reduction of the internal tax on sugars largely increased the home consumption, and at the same time opened a wider field to the trade, giving importers and refiners better advantages than before as regards foreign exportation.

The cotton trade.—As the weaving industry does not exist at Marseilles, this trade is confined to a transit business, which is partly in the hands of a few importers; but most of the cotton which passes through this port is bought directly by the manufacturers on the producing markets. A constant decline in the prices of such quantities as are bought on the exchange here, shows the general character of the trade. Nearly half of the supply of cotton for this market comes from the East Indies, and is rated in round numbers from 9 to 14 cents per pound.

It was not until late in the year 1881 that Marseilles had direct steam communication with the United States, so that until, and even after that time, quite a large proportion of the trade between the States and

this port was carried on by way of transhipment in foreign ports and consequently did not appear in the customs returns, or was attributed to the countries where the transhipment took place.

Importations of general commerce amounted, in 1881, to $246,913,291, and special commerce $182,043,065; duties collected, to $7,088,905.

Exportations of general commerce reached the amount of $162,887,994, and special commerce $98,894,949.

NANTES.

Consul Thomas Wilson reports the declared exports from his district to the United States for the year ending September 30, 1882, to be $190,960.73, and for the preceding year, $248,001.46 showing a decrease of $57,040.73 for 1882.

Importations.—The principal increase in importations has been in the following articles: Sugar from French colonies, coffee, cocoa, vanilla, oils, ores (iron and lead), logwood, hemp, jute, manures, tar, and wine.

Diminutions are remarked in the following: Sugar from foreign countries, rice grain, coal, wood, dried fruits, cotton, codfish, cheese, and guano.

Exportations.—The increase in exportations has been remarked principally in the following articles: Grains, vegetables, salt meats, sardines, refined sugar, lime, slate, furniture, haberdashery, oils, oil-cake, zinc in sheets, worked metals, hay and straw, paper, and wood-work.

Diminutions in the following: Potatoes, rice, alcohol, timbers for mines, machinery, bones, porcelain, wood, salted butter, molasses, liquors, iron ore, wine, candles, and ready-made clothing.

NICE.

Consul George F. Mosher reports the declared exports from his district to the United States for the year ending September 30, 1882, to be $158,874.06, and for the preceding year $127,232.15, an increase of $31,641.91 for 1882.

Chief among the industries of this district may be mentioned the manufacture of artistic pottery (manufactories at Nice, Vallauris, and Mentone), mosaics in wood, and carved wooden ornaments, toilet articles, and perfumery.

The value of the pottery product is about $80,000 a year; of the carved wood and mosaics, $25,000, and of perfumery, &c., $2,000,000. Considerable quantities of each of these articles are exported to the United States, the perfumery being usually sent in the form of pomades, essential and other oils, which are used in our manufactories of perfumery in the United States.

The manufacture of silk is carried on in a small way, principally in private families. Olive oil is produced in considerable quantities by the peasants; this, in fact, is their chief source of income.

The agriculture of the district is of little importance. Not enough breadstuffs are grown in the district for home consumption, and the importations of wheat, especially during the past year, principally from Russia and Italy, amounted to 15,772 tons.

Nice has an extensive tobacco manufactory, but its products are of an inferior quality. This is especially true of the tobacco grown in the consular district. The native product is usually mixed with a foreign article.

The principal revenue of this district is derived from the winter guests,

of whom some 25,000 reside at Nice and in its vicinity, leaving in the cities of Cannes, Mentone, and Nice about $25,000,000 each year. This large transient population creates a demand for American goods, which demand is met by two or three English grocers, who annually import considerable quantities of canned meats, fish, and corn, cranberries in barrels, &c.

American stoves for wood and coal, sewing-machines, and certain agricultural implements, especially hoes and axes, ought to find a good market here.

Importations of general commerce amounted, in 1881, to $5,722,856, and special commerce to $5,515,556. Duties collected to $223,304.

Exportations of general commerce reached the amount of $440,288, and special commerce $107,048.

RHEIMS.

Consul John L. Frisbie reports the declared exports from his consular district to the United States for the year ending September 30, 1882, to have been $3,262,487.17, and for the preceding year $2,812,283.44, an increase for 1882 of $450,203.73.

The vintage of 1882 in this district has been disastrous to the vine growers, owing to continued cold, rainy weather, which prevailed during the months of June, July, August, and September, which prevented the grapes from ripening and thus destroying the saccharine matter of the fruit.

The juice expressed from the grapes could hardly be called wine of even a fair second quality. In consequence of the bad vintage but few of the champagne houses are bottling any of the wine, and those who are doing anything in that way are operating with caution, doing but little, thus leaving the bulk of the product of the vineyards on the hands of the producers to be made into common table wine, which will undoubtedly result in great loss and inconvenience to them.

Woolen industries of Rheims.—In this branch of industry there has been much complaint of the stagnation of business, and many firms have been obliged to run their factories on short time and with much economy of labor, thus throwing a large number of mill operatives and laborers out of employment, and causing much privation and suffering among them.

The value of manufactured woolen fabrics is estimated at $30,880,000 for 1882, a decrease of $965,000 from 1881. There are no cotton goods manufactured in this district.

ROUEN.

Consul Albert Rhodes reports the value of declared exports from his consular district to the United States for the year ending September 30, 1882, as $3,584,991.84, and for the preceding year $2,051,001.85, an increase for 1882 of $1,533,989.99.

The imports at Rouen from the United States during the fiscal year 1882 nearly doubled the exports, the leading articles of import being wheat, the second Indian corn, the third cotton.

Arrivals of American vessels continue to diminish with each succeeding year. The carrying trade between the United States and Rouen, as elsewhere, is chiefly done by British vessels.

Importations of general commerce amounted, in 1881, to $31,935,375, and special commerce to $32,153,174. Duties collected, to $2,804,502.

Exportations of general commerce amounted to $8,797,547, and special commerce $7,735,065.

ST. ETIENNE.

Commercial Agent Theodore Hertberg reports that the value of declared exports from his district to the United States for the year ending September 30, 1882, was $1,670,733.97, and for the preceding year $1,750,837.17, a decrease of $80,103.20 for 1882. This decrease may be attributed principally to the falling off in the ribbon trade, which is due to the unequal import duty on foreign cotton yarns coming into France, as compared with Germany and Switzerland.

Within the last three or four years cotton yarns have entered largely into the ribbon manufacture, and the French tariff, in order to protect the cotton-yarn spinners of the north of France against England and American competition, put so high a rate of import duty on foreign cotton yarns that the St. Etienne manufacturer is unable to compete in price with the Bâle, Crefeld, and Barmen mixed ribbon goods. However, the fact that the traditional superiority of French taste and skill, and a more economical management of the St. Etienne fabrication, has, to some extent at least, counterbalanced the injurious consequences of a disastrous legislation.

GEORGE WALKER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Paris, February 21, 1883.

Statement showing the value of declared exports from the consular districts of France (including agencies) to the United States during the four quarters of the year ending September 30, 1852.

Articles.	Paris.	Lyons.	Bordeaux.	Marseilles.	Havre.	Reims.
Albumen	$35,084 00					
Argols and cream of tartar	321,971 00	$97,244 31	$1,585,648 24	$80,658 10		
Art, works of	1,786,395 00					
Books and engravings	325,806 00					
Boots, shoes, and leather manufactures	112,947 00				$4,147 81	
Brandy	8,480 00		114,932 70		4,313 81	
Bristles	54,592 00					
Buttons and trimmings	3,216,619 00	5,402 94				$8,515 73
Calf skins, leather, and hides	5,237,549 00	54,570 71	122,147 30	222,403 02	160,753 44	
Carpets	48,285 00					
Carriages	42,257 00					
Cheese					8,655 18	
Chemicals	661,010 00		8,611 72	70,688 17	24,447 20	
Church ornaments and metallic trimmings	73,958 00	157,594 23			2,020 27	
Clocks and watches	516,876 00				1,187 16	
Coal			1,970 80			
Coffee					29,763 26	
Corks			386 00	3,428 70	51,226 72	3,305 20
Corsets	179,721 00					563 46
Costumes and dresses	462,430 00					
Cotton goods	210,377 00	4,077 78	3,348 99		1,275 04	
Drugs and medicines	109,773 00		24,478 25	89,443 72	91,733 65	
Dyestuffs	398,753 00	74,622 59	3,718 35	34,366 86	45,968 77	
Fancy goods	2,259,002 00			1,291 34	1,114 19	3,597 76
Feathers, flowers, artificial and millinery	2,326,335 00		2,007 98	4,037 83	36,919 30	
Furniture and cabinet woods	382,328 00			214,491 09	2,454 33	
Glass, porcelain, and potteries	881,089 00		3,110 72	1,933 54	3,577 72	
Gloves	555,895 00	2,532 06		2,709 42	2,245 60	
Glue	119,080 00		2,515 51		16,310 87	
Hair, human	153,947 00				83,415 46	
Hair, vegetable and horse		9,878 56	1,654 72	1,773 49		
Hardware, machinery, rails, and pig-iron	314,152 00	56,419 02	3,117 25	119,784 42	21,392 44	1,779 20
Hats, hatters' goods, and furs	1,690,294 00			4,695 57		120 00
Horses and asses	348,372 00				132,797 00	
Hosiery	985,668 00				3,313 53	
India-rubber	29,424 00			34,977 75	72,038 84	
Jewelry and precious stones	4,294,619 00	17,178 92			5,237 79	
Laces and tulles	3,064,347 00	20,891 66			1,162 78	
Lemons				25,920 19		
Linen goods	299,145 00				7,779 65	
Liquorice				2,075 86	21,171 04	1,648 74
Marinoes, cashmeres, and miscellaneous dress goods	13,979,820 00					

Millstones, plaster, and cement	336 00			34,445 65	81,175 81	
Miscellaneous	345,564 00	188,561 36	282,792 74	59,388 35	31,913 90	6,647 76
Musical instruments	208,562 00	6,819 85	219 45		341 15	
Oils	40,055 00		237,051 16	157,142 58	14,869 55	
Optical and scientific instruments	647,796 00	30,822 27			361 40	
Ores					43,228 78	
Paints	168,802 00			9,045 66	70,353 77	
Platinum	105,887 00					
Preserved fruit and vegetables	153,288 00		376,520 91	641,247 23	162,448 11	
Preserved meat and sardines	41,790 00		545,085 06	6,609 90	41,615 96	
Prunes, raisins, nuts, &c	57,451 00		572,920 54	378,989 37		
Rags and old paper	134,163 00		17,552 83	15,214 44		
Salt				31,697 33		
Seeds and plants	183,820 00			50,417 29	819 93	
Shawls	621,085 00				1,049 43	
Silk, raw	4,771 00	2,186,654 40		54,930 60		
Silk and velvet piece goods	266,992 00	10,772,370 11	1,022 90		3,275 49	
Silk and velvet ribbons	108,156 00					
Soap, ordinary	16,388 00			60,922 37	763 08	
Sponges	19,317 00			619 52		
Stationery	106,054 00		9,636 39		540 14	
Straw goods	78,022 00					
Sugar and confectionery	21,731 00		357 77	34,955 18	1,925 37	
Tobacco	4,001 00					
Toilet articles and perfumery	788,894 00		628 21	88,953 44	145,598 80	
Upholstery goods and wall-paper	1,836,931 00					
Vinegar			5,117 22	120 39		
Whalebone	174,626 00					
Willow and wood ware	2,441 00				9,815 70	52,534 25
Wines and liquors	50,266 00	86,938 53	1,693,543 57	260,908 39	63,462 60	3,183,780 07
Wool				507,838 62	4,276 44	
Woolen cloth	519,405 00		2,776 04		14,995 79	
Zinc					22,419 45	
Total in United States gold coin	52,178,000,00	13,772,579 30	5,622,881 52	3,399,125 87	1,501,723 50	3,262,487 17
Total for the preceding year	45,948,797 00	10,585,648 66	4,325,630 63	2,396,637 34	1,343,867 89	2,812,283 44
Increase	6,229,293 00	3,186,930 64	1,297,250 89	1,002,488 03	157,855 61	450,203 73

Statement showing the value of declared exports from the consular districts of France, &c.—Continued.

Articles.	La Rochelle.	Nice.	Rouen.	St. Etienne.	Nantes.	Total for the year.
Albumen						$35,084 00
Argols and cream of tartar						2,085,521 75
Art, works of		$2,029 80				1,788,424 80
Books and engravings						325,806 00
Boots, shoes, and leather manufactures					$1,397 32	118,492 13
Brandy	$1,130,962 41					1,253,688 92
Bristles						54,592 00
Buttons and trimmings				$52,786 68		3,283,324 35
Calf skins, leather, and hides				21,546 72		5,818,970 19
Carpets			$749 00			49,034 00
Carriages						42,257 00
Cheese						8,655 18
Chemicals						764,757 09
Church ornaments and metallic trimmings						233,572 50
Clocks and watches						518,063 16
Coal					5,346 50	7,317 30
Coffee						29,763 26
Corks						58,346 62
Corsets						180,284 46
Costumes and dresses						462,430 00
Cotton goods			2,154 00	22,038 36		243,271 17
Drugs and medicines						315,428 62
Dyestuffs						557,429 57
Fancy goods						2,265,005 29
Feathers, flowers, artificial and millinery						2,369,300 11
Furniture and cabinet woods		2,337 55	119,485 00			721,095 97
Glass, porcelain, and potteries	750,708 41	1,905 30	1,232 00	494 96		1,644,051 65
Gloves				690,619 07		1,254,001 15
Glue						137,906 38
Hair, human						187,362 46
Hair, vegetable and horse						13,306 77
Hardware, machinery, rails, and pig-iron			9,257 00	541 72	6,818 60	533,261 65
Hats, hatters' goods, and furs						1,695,109 57
Horses and asses			24,230 20			505,399 20
Hosiery			1,894 00			990,875 53
India-rubber						136,460 59
Jewelry and precious stones						4,317,035 71
Laces and tulles			2,664,296 21	36,520 97		5,787,218 62
Lemons						25,920 19
Linen goods			16,832 17			323,756 82
Liquorice						2,075 85
Merinos, cashmeres, and miscellaneous dress goods			3[illegible]4,028 10			14,[illegible]06,[illegible]68 88
Millstones, plaster, and cement						115,957 46
Miscellaneous			[illegible]96,598 25	6,[illegible]06 56		[illegible]57,706 92

Musical instruments		7,072 03	4,186 06			215,942 45
Oils						460,377 28
Optical and scientific instruments	1,130 50					678,979 67
Ores					19,492 90	44,359 28
Paints						267,694 33
Platinum		573 40		3,536 40	35,146 52	105,887 00
Preserved fruit and vegetables	960 00				69,193 61	1,372,740 67
Preserved meat and sardines						705,284 53
Prunes, raisins, nuts, &c						1,009,389 91
Rags and old paper						106,930 27
Salt						31,697 33
Seeds and plants			909 00		41,861 40	277,827 62
Shawls			838 00			622,972 43
Silk, raw						2,216,356 00
Silk and velvet piece goods			232 00	1,580 10		11,045,472 60
Silk and velvet ribbons				8,6,723 10		934,878 10
Soap, ordinary						78,073 45
Sponges						19,936 52
Stationery	11,670 70					127,901 23
Straw goods	599 71				145 08	78,768 79
Sugar and confectionery		3,948 00				62,947 32
Tobacco						4,001 00
Toilet articles and perfumery		141,007 08	46,004 86			1,212,086 39
Upholstery goods and wall-paper			164,325 55			1,991,256 55
Vinegar	176 70					5,414 31
Whalebone						174,626 00
Willow and wood ware			5,725 60			70,516 55
Wines and liquors	1,511 08		766 40	8,056 33	11,558 80	5,360,791 77
Wool			15,664 00			617,779 06
Woolen cloth			105,644 44			642,821 27
Zinc						22,419 45
Total in United States gold coin	1,897,719 51	158,874 06	3,584,991 84	1,670,733 97	180,160 73	87,240,076 97
Total for the preceding year	1,877,494 47	127,232 15	2,051,001 85	1,750,837 17	248,001 46	73,467,342 06
Increase	20,225 04	31,641 91	1,533,989 99			13,772,734 91
Decrease				80,103 20	57,040 73	

EXPORTS FROM HORGEN.

REPORT BY CONSUL RICE.

I have the honor to cover herewith my quarterly report of exports from this consular jurisdiction during the months of October, November, and December, 1882, the aggregate value reaching the respectable sum of $682,720.99, being an increase of $237,842.28 over the same period embraced in last year's report, when Horgen was an agency attached to Zürich.

The industry of this region is decidedly the production of silks and silk and cotton fabrics, the largest part of which is sent to the United States. Nearly all the invoices presented at this office comprise dress silks, silks for linings, satins, &c.

The silk business within this district has been very brisk during the last year, but I am led to suppose that it has not been very remunerative to the producer.

The exporters, however, look forward to better times, and are anticipating better markets this spring. Shipments are becoming heavier, and a healthier tone seems to pervade the trade generally.

Statement showing the value of exports from the consular district of Horgen to the United States during the quarter ending December 1, 1882.

Articles.	October.	November.	December.	Total.
Silk and silk goods	$156,218 11	$187,718 39	$319,926 40	$663,862 90
Bolting-cloths and embroidery	2,296 51	491 47	5,263 28	8,051 26
Machinery	198 79			198 79
Wine, spirits, and cheese	817 88	1,069 78	490 80	2,378 46
Catholic devotional articles	1,501 87	2 948 65	1,367 60	5,818 12
Miscellaneous	1,234 26	63 30	1,113 90	2,411 46
Total	162,267 42	192,291 59	328,161 98	682,730 99

WILLIAM T. RICE, *Consul.*

UNITED STATES CONSULATE,
Horgen, Switzerland, January 1, 1883.

EXPORTS FROM ST. GALLE.

REPORT BY CONSUL BEAUCHAMP.

The value of declared exports from this consular district to the United States for the last twelve months (December 31, 1881, to December 31, 1882) was 33,710,955.99 francs ($6,506,214.51). This is an increase over 1881 of $1,902,896.73. The rapid rate of increase of November over October of 2,184,907.48 francs, and December over November of 629,574.93 francs, shows a business of gigantic proportions. If it were proper to take the month of November and calculate on that base for the next year, the amount would reach the enormous sum of about 57,500,000 francs. This consulate for the month of December alone furnished to the government a revenue of $367,195.66.

The amount collected at the various custom-houses in the United States from St. Galle goods for the year ending December 31, 1882, will be in round numbers about $2,277,175.07.

Supposing the same tariff laws to remain in force and the December figures be taken as a basis, the government would receive in cold cash as revenue from this consular district within the next year the enormous sum of $4,406,747.92.

It is proper to state that these figures are based on the *face* of the declared invoice, and no allowance is made for undervaluation of goods sent in consignment. That large quantities of goods sent in consignment are undervalued there can be no question, for the business of consignment has grown from about 5,000,000 francs in 1874 to about 17,000,000 francs in 1882.

I am of the opinion that the business of consignment is largely indebted for its rapid growth to the law enacted by Congress in 1874, known as the "anti-moiety act," and which seems to have been an invitation (at least by some so considered) to fraud by undervaluation; for under the "anti-moiety act" it is considered very difficult to prosecute to a successful termination. In the first place, it must be proved that a fraud has been committed; secondly, that the fraud was committed *knowingly* and with *intent* to defraud the revenue. Here is the rub. It is next to an impossibility for the government to gain access to the offender's books and papers on this side, and the functions of a commissioner, clothed with the judicial authority of a United States court to take evidence in continental Europe, would be hard to define, and still further increase the difficulties.

If the law were so construed that the fact of undervaluation was evidence of fraud, and the burden of proof thrown on the offender to establish the contrary, my opinion is that there would be less consigning, less undervaluation.

Until this law is replaced by some other wise legislation covering the case, it will be difficult to prevent frauds while the duties are collectible at an ad-valorem rate.

It has been claimed and proved, and the records of numerous custom-houses will certainly show, that goods in consignment have largely been undervalued all the way from 10 per cent. to 30 per cent., and in many cases the per cent. has been much higher.

Under instructions, the consul at this port is required to furnish the collectors at the various ports in the United States with a monthly statement of prices paid by the different manufacturers and merchants sending goods to the United States through this consulate.

This is obtained by a written application to the different manufacturers and merchants, and when their written replies are received an average is made for the whole number, which is given as the "average prices." I soon found, however, that it was necessary to make out *two* lists of average prices paid, one for the consignor and one for the seller. The average price-list made out on this plan for the month of November shows that the consignor's prices, as quoted by himself, were about 15 per cent. below the *bona fide* seller's. This difference, if increased in the same proportion for the next ten years that it has for the last ten, will entirely exclude the *bona fide* buyer from this market. If this were a real undervaluation, and supposing that the invoices were not advanced by the appraisers at the various ports, the government would have lost as revenue on last year's imports from this district 17,000,000 francs, about $492,150.

A remedy for this evil might be suggested in several ways. First of

all, the "anti-moiety act" should be repealed. Second, the consul should be clothed with more power, so long as the ad-valorem system prevails, by which he may compel the shipper to furnish samples to the invoice, where the goods are sampleable, and which in every case should be transmitted by the consul, with the triplicate invoice, to the collector of the port where they are intended for entry, and no appraiser should be permitted to pass the goods until the invoice and samples are received and have been carefully compared with the merchandise. The question of "market value" should be definitely settled, and in such a manner that would admit of no double construction.

The "market value" should be determined either at the place of production or at the port of entry. If the place of production is taken, the consul should have full power to refuse and withhold his certificate to the invoice until such requirements as may be prescribed have been complied with. As the law now stands there is no authority which will authorize a consul to withhold his certificate from any kind of an invoice which a shipper may choose to present to him; his only remedy is that he may state in the column of corrections on the invoice what he considers to be the market value of the goods, and for which correction the shipper seems to care nothing, as he says that his goods are generally entered before the triplicate invoice is received at the custom-house, and when it does arrive little attention is paid to it. A *pro forma* invoice or appraisement entry of goods should be admitted in very rare instances, and a strong case should always be made out, accounting for the absence of the regular invoice before the merchandise should be entered on any *pro forma* invoice.

If the market value of the goods are to be ascertained at the place of production, the consul should be authorized to procure expert knowledge to this end, and a certain sum should be set apart each year for that purpose, and in support of this proposition I would respectfully refer to the very able report of Special Agent Tichenor, made to the Secretary of the Treasury from this place in May of last year, on the subject of "embroideries."

To entirely prevent frauds by undervaluation, so long as the ad-valorem system governs the collection of duties on embroideries, seems an utter impossibility.

It is claimed by the *bone fide* purchasers that if the duties on these articles were collected on the weight, the duties made specific, they would fare much better in the open market, as then the consigner would have no possible advantages, and all the merchants and importers at least would be placed on an equal footing. Special Agent Tichenor, in his report above referred to, also takes the ground that a specific duty on all embroideries sent from this district is the only true system. To my mind the simplest and easiest manner to prevent undervaluation is to make the duty specific, based upon weight, instead of ad valorem, based upon market value.

From the information furnished from the Federal Assembly to the public press of Switzerland, it appears that from the six United States consular districts in Switzerland more than one-third of all the merchandise exported to the United States during 1882 came from the St. Galle district. The following table may be of interest to the statistical bureau of the Department.

EMORY P. BEAUCHAMP,
Consul.

UNITED STATES CONSULATE,
St. Galle, January 27, 1883.

Merchandise exported from Switzerland to the United States.

[Amounts are given in francs.]

Consular district (konsulatsbezirke).	Silk goods (Seide und Seidenwaaren.)	Cotton goods (Baumwoll und Wollgewebe.)	Embroideries (Stickereien).	Straw and hair goods, trees work (Stroh und Rosshaargeflechte).	Watches and parts thereof (Uhren, Uhrenbestandtheile).	Music boxes (Musikdosen).
St. Galle	2, 229, 830	2, 824, 959	28, 432, 728	.....	.....	.....
Zürich and Horgen	31, 220, 029	.....	.....	1, 164, 174	.....	.....
Basle and Bern	11, 581, 770	.....	.....	420, 000	11, 147, 675	.....
Geneva	.....	.....	.....	.....	2, 090, 814	582, 799
Total, 1882	45, 030, 630	2, 824, 959	28, 432, 728	1, 584, 174	13, 238, 489	582, 799
1881	32, 984, 958	1, 264, 681	18, 923, 534	3, 347, 595	11, 809, 122	447, 599
1880	40, 414, 646	1, 012, 382	22, 549, 195	2, 947, 789	10, 143, 813	261, 833
1879	37, 374, 245	1, 187, 999	18, 923, 535	1, 948, 493	5, 292, 098	187, 759
1878	27, 601, 539	751, 969	16, 690, 107	1, 201, 529	3, 995, 716	95, 679
1877	26, 922, 791	481, 495	16, 195, 602	1, 580, 287	3, 569, 048	102, 105
1876	26, 613, 469	740, 531	14, 580, 501	2, 477, 846	4, 809, 822	141, 357
1875	23, 401, 405	688, 237	15, 912, 519	1, 683, 653	8, 499, 501	186, 523
1874	25, 083, 566	1, 460, 361	16, 403, 314	1, 609, 174	12, 119, 941	252, 817
1873	27, 060, 929	2, 934, 829	10, 253, 320	2, 209, 634	13, 054, 147	433, 573
1872	40, 760, 941	2, 648, 277	11, 437, 174	1, 324, 750	18, 312, 511	441, 852
1871	42, 928, 017	1, 974, 496	10, 293, 787	3, 106, 693	17, 105, 752	350, 637
1870	35, 844, 786	1, 134, 850	6, 962, 403	3, 884, 064	16, 512, 162	341, 148
1869	28, 552, 883	2, 253, 135	3, 596, 701	2, 802, 764	13, 322, 578	258, 738
1868	21, 197, 593	1, 242, 910	3, 050, 127	2, 102, 497	10, 469, 728	344, 448
1867	18, 818, 073	2, 038, 330	3, 154, 087	2, 432, 405	10, 362, 418	265, 196
1866	31, 766, 072	5, 173, 296	3, 236, 138	3, 179, 795	13, 093, 408	300, 108
1865	29, 970, 464	4, 268, 900	1, 132, 231	1, 521, 184	11, 301, 954	108, 399
1864	25, 451, 928	1, 647, 335	352, 277	806, 700	8, 477, 192	72, 482

Consular district (konsulatsbezirke).	Cheese (Käse).	Leather (Leder).	Aniline dyes and colors (Anilinfarben).	Miscellaneous (Verschiedenes).	Total. 1882.	Total. 1881.	
St. Galle	.....	.....	.....	223, 438	33, 710, 955	23, 851, 388	
Zürich and Horgen	.....	.....	.....	1, 171, 515	33, 555, 718	26, 049, 552	
Basle and Bern	2, 849, 343	.....	960, 677	887, 633	27, 847, 098	24, 989, 409	
Geneva	.....	2, 537, 727	97, 436	803, 200	6, 111, 976	4, 441, 417	
Total, 1882	2, 849, 343	2, 537, 727	1, 058, 113	3, 105, 787	101, 225, 747	1882.	
1881	2, 372, 219	1, 528, 675	3, 943, 345		79, 331, 766	1881.	
1880	1, 969, 418	962, 912	3, 243, 920		84, 405, 908	1880.	
1879	1, 381, 269	874, 462	2, 371, 841		69, 541, 701	1879.	
1878	1, 533, 598	518, 554	2, 209, 187		54, 597, 878	1878.	
1877	1, 675, 024	479, 667	2, 019, 426		53, 025, 445	1877.	
1876	1, 848, 360	627, 868	1, 644, 190		53, 483, 944	1876.	
1875	1, 934, 282	437, 621	2, 123, 614		54, 867, 355	1875.	
1874	2, 007, 929	654, 920	1, 759, 909		61, 351, 931	1874.	
1873	2, 068, 003	426, 461	1, 350, 913		60, 391, 809	1873.	
1872	2, 229, 213	446, 879	1, 879, 506		79, 481, 103	1872.	
1871	1, 688, 322	701, 374	2, 526, 602		80, 675, 680	1871.	
1870	1, 560, 409	582, 177	2, 308, 245		69, 190, 244	1870.	
1869	1, 268, 417	44, 603	1, 531, 609		53, 931, 428	1869.	
1868	1, 057, 437	217, 986	1, 622, 265		41, 304, 991	1868.	
1867	827, 647	156, 734	1, 205, 428		39, 260, 318	1867.	
1866	700, 130	110, 885	1, 098, 541		58, 658, 373	1866.	
1865	490, 895	.....	486, 022		49, 280, 049	1865.	
1864	241, 573	22, 125	185, 030		37, 256, 642	1864.	

EXPORTS FROM GENEVA.

Value of declared exports to the United States from the consular district of Geneva for the quarter ending September 30, 1882.

Articles.	Geneva.		Vevey.		Total.	
	Francs.	*Dollars.*	*Francs.*	*Dollars.*	*Francs.*	*Dollars.*
Aniline colors	1,000.00	193.00			1,000.00	193.00
Files and gravers	8,946.85	1,726.74	32,447.60	6,262.89	41,394.45	7,989.63
Leather			708,615.45	136,762.78	708,615.45	136,762.78
Milk, products of	3,292.20	635.40	56,350.00	10,875.55	59,642.20	11,510.95
Musical boxes	29,053.65	5,607.35	159,863.75	30,853.70	188,917.40	36,461.05
Watches	723,292.90	139,595.53			723,292.90	139,595.53
Wine and spirits			21,396.50	4,129.52	21,396.50	4,129.52
Miscellaneous	5,404.00	1,042.97	61,520.05	11,873.37	66,924.05	12,916.34
Total quarter ending September 30, 1882	770,989.60	148,800.99	1,040,193.35	200,757.31	1,811,182.95	349,558.30
Total quarter ending September 30, 1881	621,783.70	120,004.25	585,092.55	112,922.86	1,206,876.25	232,927.11
Increase	149,205.90	28,796.74	455,100.80	87,834.45	604,306.70	116,631.19

LYELL T. ADAMS.
Consul.

GENEVA, *September* 30, 1882.

EXPORTS FROM PRAGUE, BOHEMIA.

Statement showing the declared exports from the consular district of Prague, Bohemia, to the United States during the four quarters of the year ending September 30, 1882.

Articles.	Quarter ending—				Total for the year in U. S. gold dollars.
	December 31, 1881.	March 31, 1882.	June 30, 1882.	September 30, 1882.	
Bed feathers	$2,620 37	$1,543 60	$335 25	$3,394 73	$7,893 95
Beer	1,227 38	7,630 42	9,319 81	13,724 44	31,902 05
Black lead	8,829 04	1,925 86	165 63	3,018 96	13,939 49
Books	2,791 82	1,435 23	659 33	1,106 68	5,993 06
Buttons	31,016 86	28,999 32	17,568 27	14,895 32	92,479 67
Cloth and woolen goods	35,516 94	33,143 87	24,522 95	7,222 26	100,406 02
Cotton goods	7,070 60	9,460 10	1,443 37	6,456 01	24,430 08
Drugs and chemicals	2,199 99	4,217 99	3,064 20	5,383 57	14,865 75
Earthen ware	2,909 14	7,338 54	20,809 54	24,386 50	55,503 72
Glassware	259,456 16	371,073 40	382,465 50	712,456 74	1,725,451 80
Gloves				3,686 10	3,686 10
Gold and garnet jewelry	4,612 94	5,613 99	4,416 92	15,496 16	29,140 01
Hides and skins	13,806 34	7,112 13	16,584 06	6,003 72	43,506 25
Hops	25,497 70			27,824 15	53,321 85
Human hair	1,316 50	8,953 21	557 51	3,633 79	14,461 01
Mineral water	3,398 66	1,952 27	6,224 95	3,161 06	14,736 94
Musical instruments	535 84		1,438 01	1,010 66	2,984 51
Porcelain	8,679 75	10,542 97	31,646 85	57,592 40	108,461 97
Toys and chipped goods	6,676 30	1,718 80	11,692 42	5,206 42	25,293 94
Wine	6,543 88	2,235 84	13,332 44	233 33	22,345 49
Miscellaneous	1,744 35	9,678 42	7,851 40	14,500 44	33,774 61
Total	426,510 56	513,575 98	554,098 41	930,393 34	2,424,578 27
Total for the preceding year	303,794 35	363,964 66	512,746 05	775,788 82	1,956,293 88
Increase	122,716 21	149,611 30	41,352 36	154,604 52	468,284 39

NOTE.—The average value of the Austrian paper florin was during the quarter ending—

December 31, 1881	40.40 cents.
March 31, 1882	40.60 cents.
June 30, 1882	40.40 cents.
September 30 1882	40.60 cents.

The amount of declared exports in Austrian currency was 5,905,843 florins 96 kr.

CHARLES A. PHELPS.
Consul.

NOTES.

Exports from Messina to the United States.—Consul Owen, under date of January 22, 1883, reports as follows upon the exports from his district to the United States:

The value of declared exports for the quarter amounted to $580,695.41. The number of invoices certified during the past year was 1,071, the largest number yet known.

The exportation of green fruit to the United States is steadily increasing, and the proposed change from an ad valorem to a specific duty on that article, as expressed in the tariff bill now before Congress, has excited a good deal of comment among shippers. In my judgment the change is a wise one and will be of great benefit to the Government, as, at present, it is almost impossible, from a lack of correct "price currents," a uniform standard, and the different grades of fruit upon the market, to aim at a just value of the product. A specific duty cannot be evaded, and the questions that must always rise between the appraisers and consignees under the present system of ad valorem duty, however careful and diligent a consul may be in endeavoring to fix a proper value, will thereby be avoided, and the difficulty in collecting the duty removed.

Exports from Hamilton, Ontario.—I have the honor to report that the total values of exports to the United States from the district of Hamilton, Ontario, for the year 1882, amounted to $2,657,779.26. Of this amount, the leading articles of export and their values were as follows: animals, $597,508.96; barley, $441,488.86; eggs, $395,040.78; malt, $286,250.06; machinery, $65,740.05; oats, $52,023.33; pease, $81,604.64; potatoes, $35,924.03; skins of animals, $40,969.31; wheat, $57,147.55; wool, $116,559.81. A duty of one cent per dozen upon eggs, as I suggested in a former dispatch, would have amounted during the past year to $24,000 in this consular district alone, as there were over two millions three hundred and twenty-four thousand dozen eggs exported to the United States from the Hamilton consular district in the year 1882. Eggs are now imported into the United States free.—From a report by Consul Frank Leland, dated February 10, 1883.

French plushes: Advice to American buyers.—Under date of January 10, 1883, Consul Rhodes, of Rouen, gives the following advice to American buyers:

Considerable quantities of Utrecht velvet, or plush, chiefly used in furnishing railway cars, omnibuses, and offices, are purchased for the United States in Amiens, where these plushes are largely manufactured by two firms only; the one, F. Sevin père, fils & Degony making the finer quality, and the other, Bongon & Lefevre, the cheaper kind. About half the quantity of these velvets sent to the United States are purchased on direct orders, but the other half, I have been surprised to learn, are purchased through middle men in Paris, who charge commission and storage and who must naturally make the consumer in America pay therefor. I would in consequence advise the buyer in the United States, if he wishes to avoid this additional charge, to send his orders direct to one of the two manufacturing firms above named, who are considered trustworthy, and he will thus obtain his goods several per cent. cheaper.

CROPS IN HOLLAND.

Statement showing the result of the crops in the Netherlands in 1882.

Crops.	100.		90.		80.		70.		60.		50.		40.		30.		20.		10.	
	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.	Grain, seed, roots, fruit, &c.	Straw, hay, dry leaf.
Wheat	17	21	57	77	209	175	127	128	76	74	206	185	51	55	3	6	5	4	2	2
Rye	78	115	202	194	210	196	117	97	87	78	150	139	39	38	11	12	7	6	2	2
Barley	8	13	83	74	159	161	154	113	93	84	181	158	51	66	13	14	9	13	5	5
Oats	74	87	197	194	254	221	179	162	92	90	142	132	36	34	9	11	9	9	2	3
Buckwheat	18	15	34	24	86	58	52	53	44	44	93	75	46	41	29	40	47	47	17	18
Horse beans	16	21	74	68	133	122	122	92	94	81	202	145	82	39	38	20	23	20	4	4
White beans	.....	.....	.....	.....	.....	.....	1	1	1	1	3	4	3	1	4	3	4	4	.....	.....
Brown beans	.....	.....	.....	.....	.....	.....	.....	.....	2	2	6	3	2	2	3	3	4	1	.....	.....
Pease	14	12	26	21	87	68	117	98	76	72	193	154	124	65	57	44	55	55	8	6
Potatoes	2	.....	9	.....	27	.....	30	.....	36	.....	180	.....	235	.....	207	.....	264	.....	59	.....
Sugar beets	2	.....	13	.....	32	.....	50	.....	50	.....	153	.....	58	.....	14	.....	13	.....	2	.....
Rape seed	5	3	18	8	47	24	71	25	55	25	117	48	64	22	35	21	23	11	4	3
Mustard seed	.....	.....	1	.....	.....	1	.....	.....	1	.....	2	2	3	2	.....	.....	.....	.....	.....	.....
Caraway seed	.....	.....	1	1	2	1	7	2	7	4	26	15	24	18	15	11	7	3	1	.....
Canary seed	.....	1	1	1	3	5	13	8	11	12	24	14	5	4	6	6	1	1	.....	.....
Chicory	1	.....	.....	.....	3	.....	10	.....	3	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....
Flax	3	2	15	13	58	41	82	67	53	51	122	98	48	36	22	8	17	9	5	3
Hemp	1	.....	1	1	5	5	15	12	2	3	14	13	6	4	12	11	2	2	5	3
Tobacco	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	10	.....	7	.....	11	.....	9	.....	1
Mangold-wurzel	7	.....	35	.....	124	.....	128	.....	86	.....	193	.....	43	.....	17	.....	13	.....	1	.....
Rapecole	11	.....	36	.....	105	.....	81	.....	56	.....	69	.....	15	.....	2	.....	4	.....	1	.....
Carrots	6	.....	33	.....	103	.....	101	.....	65	.....	154	.....	56	.....	22	.....	28	.....	2	.....
Clover	67	64	168	128	203	168	91	77	44	42	58	42	18	3	13	4	15	8	10	4
Clover seed	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	3	.....	10	.....	13	.....
Meadow culture	222	174	286	183	225	207	89	119	30	47	41	74	9	15	2	8	1	5	.....	2
Garden herbs	4	.....	18	.....	48	.....	40	.....	16	.....	50	.....	16	.....	5	.....	1	.....	1	.....
Apples	.....	.....	1	.....	5	.....	17	.....	15	.....	71	.....	135	.....	242	.....	218	.....	183	.....
Pears	.....	.....	.....	.....	6	.....	13	.....	21	.....	61	.....	87	.....	237	.....	268	.....	187	.....
Cherries	1	.....	7	.....	10	.....	22	.....	25	.....	77	.....	79	.....	95	.....	104	.....	85	.....
Plums	27	.....	30	.....	48	.....	44	.....	26	.....	96	.....	61	.....	88	.....	65	.....	60	.....
Strawberries	32	.....	67	.....	59	.....	68	.....	29	.....	55	.....	13	.....	9	.....	13	.....	8	.....

Currants	11		42		68		57		36		50		25		19		10		4	
Bulb culture			4		11		8		2		6		6		1		1			
Nurseries	4		9		27		19		6		24		4		1		2			
Floriculture	1		5		15		14		3		11		3		1		1			
Forest culture	8		28		46		73		22		52		7		10		6		2	
Madder											1									
Onions					2						4		2		4					

NOTE.—The above figures signify:

100. Excellent crop.
90. Very good crop.
80. Good crop.
70. Pretty good crop.
60. More than middling crop.
50. Middling crop.
40. Less than middling crop.
30. Scanty crop.
20. Bad crop.
10 Failed.

N. B.—The figures in the columns represent the number of communes (Gemeenten) in which the crop was 100, 90, 80, &c.

D. ECKSTEIN,
Consul at Amsterdam.

Exports from the Philippines.—The following report upon the commerce, &c., for the month of November, 1882, is furnished by Acting Consul Klinck, of Manila:

EXPORTS.—Manila is showing some sign of recovery from the effects of the late disastrous cyclones, and in a few days hence it is expected that the port will be declared free from epidemic cholera. The epidemic has been causing sad havoc in the northern provinces, the whole of which have been officially declared infected. In the southern provinces the epidemic is gradually dying out.

Regarding the crops, sugar has not suffered to any great extent, and as the Hoilo and Cebu crops are thus far intact, the yield of the islands will probably be a good one. Coffee suffered to some extent, but the greater part of what was blown down has been gathered and forced into a marketable condition. Hemp suffered slightly in Albay, very seriously in both Camarines (Naga and Daet), but not at all in Samar and Leyte. The damage to the rice crops was on the whole insignificant, but a part of the heavy Pangasinan crop will probably be lost on account of the scarcity of hands to gather it.

Of the stranded vessels the Ingeborg is still on the beach, but they expect to float her in a few days.

Leaf tobacco.—There has been no business, and as the new cigar manufactories will have to draw their supplies for the next year from government, there will probably be no reduction in upset prices for some time to come.

Cigars.—Several new factories are preparing to open on the 1st proximo.

Statement showing the quantity, value, and duties of the principal articles of exports during the month of October, 1882.

Articles.	Quantity.	Value.	Duties.
	Kilograms.		
Hemp	2,891,579	$408,865 00	$5,783 16
Cordage	31,562	8,021 00	63 13
Indigo			
Liquid indigo	68,533	3,280 00	66 53
Rice			
Sugar	4,247,688	240,408 00	5,946 77
Coffee	7,503	918 00	22 51
Sapan wood	347,146	8,284 00	138 86
Total		669,776 00	12,022 96
Total for preceding month		634,496 00	11,329 76
Increase		35,280 00	693 20
Decrease			

The silk-labor market of Lyons.—Under date of December 6, 1882, Consul Peixotto supplies the following statistics:

The condition house registered for the past week 1,428 bales of silk, weighing 94,904 kilograms, against 1,404 bales for the corresponding week of 1881. The deficit of entries for November was about 33 per cent. Since, the harvest prices of raw silk have declined from 7 to 8 per cent. The market continues without animation, and there is an increasing tendency towards decline, especially for China silks. The presence of a considerable number of American and English buyers has not influenced the situation of silk stuffs. Manufacturers complain not only of the paucity of orders but of great difficulty in making or rather knowing what to make, no leading or pronounced style having been fixed upon. Buyers have rarely seemed more indisposed to give commissions, and fabricants to take chances, except for some few leading articles and upon firm orders.

Upwards of 15,000 weavers of both sexes are without employment or with so little as to daily increase the seriousness of their situation. Fortunately no severe weather has as yet aggravated their condition, and no demonstrations have taken place since my previous report.

Spindles in Europe.—Consul Harper, of Munich, supplies the following statistics concerning the number of spindles in Europe, India, and the United States:

The number of spindles in Europe, the United States, and the East Indies, in the year 1881, was 74,716,300. The number in the different countries, and the percentage of increase in each over 1880, is given as follows:

	Number of spindles.	Percentage of increase over 1880.
France	5,000,000	0
Germany	4,815,000	1.4
Russia	3,640,000	7.7
Switzerland	1,850,000	0
Spain	1,835,000	1.9
Austria	1,765,000	0.86
Italy	985,000	5.9
Belgium	800,000	0
Sweden and Norway	310,000	0
Holland	245,000	4.2
Great Britain	40,100,000	0.9
United States of America	11,875,000	3.26
East Indies	1,496,300	0
Total	74,716,300	

From this it will be seen that the largest percentage of increase was made in Russia Italy, and Holland.

Russian Beet-root Sugar.—Consul-General Stanton, in a recent report, gives the following statistics of the beet-root sugar industry of Russia:

There were 234,425 desiatines planted the past summer with beet-roots, 99,851 desiatines hereof belonging to the refineries and 134,574 desiatines to private individuals. The crop in autumn last, the commencement of the sugar season, was estimated at 216,327,570 poods, the largest plantations being in the government of Kieff. At the commencement of the present season there were 236 factories in all, viz: 197 mills and 39 refineries. Of these mills, 52 employ the pressing and 184 the diffusion process.

Growth and Commerce of Australasia.—In a report dated December 29, 1882, Consul Griffin, of Auckland, writes as follows concerning the growth and commerce of Australasia, and the trade of the United States therewith:

The importance of the colonies in the trade of the world cannot be easily overestimated. Their growth has been extraordinary. In 1871 the total population of the seven Australasian colonies, which include the five Australian colonies, viz, Victoria, New South Wales, Queensland, South Australia, and West Australia, and the colonies Tasmania, and New Zealand, was only 1,978,740. In 1881 the total population was 2,835,954, showing an increase in ten years of 857,206, or an average of 85.720 per cent. Ten years ago the combined exports of the same colonies amounted to $323,284,840, and in 1881 they were $505,487,485, showing an advance of more than 50 per cent. This is equal to $181.87 per head. The public revenue of the seven colonies during the year 1881 was $103,068,360, against $85,345,075 for 1880, being an increase of $17,723,285. The colonies possess 5,426 miles of railway, 49,105 miles of telegraph, 78,000,000 sheep, the wool-clip of which last year reached the sum of $100,000,000, besides 8,691,910 cattle and several millions of horses and pigs. During the year 1881, 16,690 vessels, of an aggregate tonnage of 9,504,130, touched at the various ports of the colonies. The same colonies have 7,017,380 acres of land under profitable cultivation, and produce annually about 30,000,000 bushels of wheat and 11,717,819 bushels of oats (of this last article New Zealand alone produces 6,924,848 bushels).

Notwithstanding the rapid strides the colonies have been making within the last few years, it is melancholy to contemplate the small amount of trade done between them and the United States. This trade, however, small as it is, has been steadily increasing. In 1871 the total value of the imports from the United States to the Australasian colonies was only $486,170, and in 1881 the amount swelled to $5,850,992.

The value of imports, however, from Great Britain alone during the year 1881 reached the enormous sum of $125,303,325.

The tariff laws of the colonies apply the same to goods imported from Great Britain as from the United States, but the cause of this vast disproportion in the trade is unquestionably the exorbitant duties charged on the Australasian wools imported into the United States, which forbid a fair exchange of products. Great Britain, of course, will continue to absorb the greater part of the trade until these duties are so modified as to admit of something like a reciprocity between the two countries.

The woolen goods trade of Rheims.—Under date of January 2, 1883, Consul Frisbie reports as follows concerning the condition of the woolen goods trade in his district:

From the best information which I can obtain by inquiry the past year has not been one of much encouragement for the trade in woolen fabrics, and that much complaint has been made by the manufacturers on account of the hard times and stagnation of business.

In fact, these complaints of slack trade and hard times are heard from every part of France, and are not alone local with Rheims.

The good reputation which the fine merinos and cashmeres of Rheims have established for more than a hundred years would undoubtedly protect them against competition in a dull market, unless the depression was general, when they would have to suffer in the general stagnation of business, which appears to be the case.

It is estimated that the production of Rheims woolen fabrics for 1882 will be about 60,000,000 francs ($12,000,000) in value, which is a decrease of about 5,000,000 francs from that of 1881.

Whatever the cause for the dull trade may be, its existence remains an undisputed fact, and it is said that many of the Rheims manufacturers have been obliged to economize in time and labor, and to generally operate their business with much caution during the past few months.

It is gratifying to report that but one considerable failure has occurred during the past year, and that all are hopeful of better times and more lively trade in the near future, but upon what basis the hope is warranted it is just now difficult for one to see.

This hope does not seem to be very well presented, coupled with the current report that several of the large manufacturers are soon to liquidate their business, and either retire or establish themselves in other and more favored lands.

Condition of labor in Rheims.—As a consequence of the dull times, there are now in Rheims a large number of mill operatives and laborers out of employment—reported at from 2,600 to 3,000.

These people are willing to work, but there is nothing for them to do. I am informed that the city has given employment to a large number of the men (1,300) on city work, at from thirty to thirty-six sous (30 to 36 cents) per day, which work is given them in the name of public charity; but such small wages can be but a meager support for a family, when the women and children can find nothing to do by which to aid the husband and father in their support; for here, where labor is so poorly paid, it is always necessary for each member of a family to work and earn something for the family benefit.

There is said to be much want and privation among these poor people, and in many cases actual suffering. In Rheims there is no poor-rate on the rolls of the tax-gatherer, nor almshouses for the benefit of the indigent and destitute poor, and but very little municipal or government aid is given them; and I am told that the same regulation, or rather lack of regulation, prevails throughout France, as there is no law authorizing a different course, and that when there is no work for the poor to do they must live mostly by private charity, or suffer through the struggle as best they may, awaiting better times for relief. When I "look on this picture and on that," I feel thankful that I am a citizen of that most highly favored country where labor is well requited, and where energy, industry, and perseverance, coupled with an honorable endeavor, are always sure to find a remunerative and happy reward.—From a report by Consul FRISBIE, dated January 3, 1883.

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O

COMMERCIAL RELATIONS OF THE UNITED STATES.

GLASS MANUFACTURES

OF

EUROPE.

REPORTS FROM THE CONSULS OF THE UNITED STATES IN REPLY TO CIRCULARS FROM THE DEPARTMENT OF STATE, ON LIME, FLINT, AND WINDOW-GLASS MANUFACTURES, AND ON THE BEST MEANS OF INTRODUCING AMERICAN GLASS-WARE INTO THEIR SEVERAL DISTRICTS.

No. 29.—March, 1883.

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GLASS MANUFACTURES OF EUROPE.

DEPARTMENT CIRCULARS.

I.—WINDOW-GLASS.

DEPARTMENT OF STATE,
Washington, June 1, 1882.

To the Consul of the United States at ——— :

SIR: I inclose herewith a series of questions relating to the cost of manufacturing window-glass in Europe, which I will thank you to reply to at your earliest convenience, as far as practicable, and add any other information upon the subject that you may obtain while making the inquiries.

You will avoid incurring any expense in obtaining the information.

I am, sir, your obedient servant,

J. C. BANCROFT DAVIS,
Assistant Secretary.

Statement of general system of working by window-glass manufacturers in ———.

Number of pots per furnace, ———; size of pots, ———.
Average weight material melted: pounds per day, ———; pounds per week, ———.
Coal used each melt and blowing, ——— tons.
Wood used each melt and blowing, ——— cords.
Wood used each week for flattening for one furnace, ——— cords.
Coal used each week for flattening for one furnace, ——— tons.
Coke used each week for flattening for one furnace, ——— tons.
Daily product of glass ready to work, ——— pounds; number boxes, 50 feet, ———; packed daily, ———.
Number of blowings per month, ———, or ——— per week.
Usual size rollers, ———, in x ——— in.
Number of rollers made per blowing, ———.

Statement of price of labor paid by window-glass manufacturers.

Blowers' wages.	For sizes under 10 × 15.					10 × 16 to 12 × 18.				12 × 19 × 20 × 24.		
	Quality.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.
Single thick or 16 ounces	Per 100 feet.											
Double thick or 24 ounces	Per 100 feet.											
Tenders or blowers												
Assistants												
Flatteners:												
Shover assistant												
Laying-out assistant												
Taking-off assistant												
Other assistant												
Cutters												
Single thick or 16 ounces	Per 100 feet.											
Double thick or 24 ounces	Per 100 feet.											

Statement of price of labor paid by window-glass manufacturers—Continued.

Blowers' wages.	For sizes under 10 × 15.	20 × 25 × 30 × 46.			30 × 40 to 30 × 46.			Over 30 × 46		
	Quality.	1.	2.	3.	1.	2.	3.	1.	2.	3
Single thick or 16 ounces	Per 100 feet.									
Double thick or 24 ounces	Per 100 feet.									
Tenders or blowers										
Assistants										
Flatteners:										
Shover assistant										
Laying-out assistant										
Taking-off assistant										
Other assistant										
Cutters										
Single thick or 16 ounces	Per 100 feet.									
Double thick or 24 ounces	Per 100 feet.									

Master shearer to run furnace, per month or per melt, ——.
Assistant shearer, per month or per melt, ——.
Engineers, per month or per melt, ——.
Day laborers, per month or per melt, ——.
Blacksmiths, per month or per melt, ——.

Statement of cost of material used by window-glass manufacturers.

	Kind used.	Cost at mines per ton, 2,240 pounds.	Cost at factory per ton, 2,240 pounds.	Cost dried as cleaned ready for use.	Amount used per melt.	Number melts per week.
Sand						
Lime or limestone						
Sulphate or carbonate of soda						
Cullet or old glass						
Fuel:						
Coal for furnace						
Coal for flattening						
Wood for furnace						
Wood for flattening						
Coke for furnace						
Coke for flattening						

Boxes.—Cast each at factory.

II.—FLINT AND LIME GLASS.

DEPARTMENT OF STATE,
Washington, July 31, 1882.

To the —— of the United States at ——:

SIR: I inclose herewith a series of questions relating to flint and lime glass manufactures of foreign countries, which I will thank you to answer as fully and promptly as possible, adding to your report such other information as you may obtain in investigating the subject.

I am, sir, your obedient servant,

JOHN DAVIS,
Assistant Secretary.

Series of questions relating to the manufacture of flint and lime glassware.

1st. Where is the glassware manufactured that is received at your port?
2d. What articles of glassware are used, and are they pressed or blown?
3d. What is the average cost of each article at the point of manufacture?
4th. What is the cost of packages and sizes of same?
5th. What is the rate of freight and insurance?
6th. What are the terms of payment?
7th. Are there any duties, and what are the custom-house and landing expenses?
8th. Are there any laws or regulations discriminating against articles manufactured in the United States as compared with any other country?

The foregoing inquiries are made in the interest of our manufacturers of pressed glassware, including the following articles, viz, lamp-chimneys, bowls, dishes, mugs, caster-bottles, bar-bottles, bread-plates, cream-jugs, celeries, globes, shades and founts, goblets, tumblers and glasses, pickle-jars, round and oval dishes, sugar-bowls, ink-stands, molasses and sirup jugs, pitchers, spoon-holders, salts, champagnes, clarets, wines, and many varieties of stem ware.

Please state what you consider the best means of increasing the trade of the United States in these articles with your port.

BELGIAN WINDOW-GLASS.

REPORT BY CONSUL WILSON, OF BRUSSELS.

I have the honor to inclose herewith a statement of the price of material used and wages paid by the window-glass manufacturers in this consular district. The prices of material I have given in the place assigned it in the table sent me by the Department; but as glass-blowers are not paid in Belgium as they are in the United States, I have been unable to give the price of this class of labor for all the various sizes of glass indicated in the table, but have given this information as nearly as possible in another form.

JOHN WILSON.

CONSULATE OF THE UNITED STATES,
Brussels, July 3, 1882.

Statement of general system of working by window-glass manufacturers in the province of Hainault, Belgium.

Number of pots per furnace, 6; size of pots, 1.30 by 1.10 meters.
Average weight material melted: Pounds per day, 6,000; pounds per week, 30,000.
Coal used each melt and blowing, 12 tons.
Wood used each melt and blowing, none.
Wood used each week for flattening for one furnace, none.
Coal used each week for flattening for one furnace, 12 tons.
Coke used each week for flattening for one furnace, none.
Daily product of glass ready to work, 5,000 to 6,000 pounds; number of boxes, 50 feet; packed daily, about 100.
Number of blowings per month, 20 to 22, or 5 per week.
Usual size of rollers, 34 by 50 inches.
Number of rollers made per blowing, 90 to 100 per pot.

STATEMENT OF PRICE OF LABOR PAID BY WINDOW-GLASS MANUFACTURERS.

The mode of paying glass-blowers in the window-glass manufactories of this kingdom being entirely different from that of the United States, I cannot fill out the above table, but give below what will sufficiently indicate the prices paid. When the size of a sheet of glass is given below, it means the united measurement of two sides of the square, and not their multiplication, thus: 32 × 48 inches=80 inches.

PRICE OF LABOR PAID BY WINDOW-GLASS MANUFACTURERS IN BELGIUM.

Blowers are paid for each six cylinders or rollers blown, according to the number of square inches they contain, as follows: For every six cylinders measuring 78 inches and weighing 16 ounces each, 1.40 francs. When the cylinders weigh 24 ounces they are paid 50 per cent. more than the above rates, and where they weigh 32 ounces they get 100 per cent. more. The helpers' wages are included in these rates, and are paid by the blowers. For instance, a blower who blows 96 cylinders 32 by 48 inches, weighing 16 ounces, or 64 cylinders weighing 24 ounces, receives sixteen times 1.41, or 22.56 francs, out of which he pays his assistant 5 francs. Flatteners receive from 150 to 200 francs per month (according to merit). Assistants receive from 40 to 50 francs per month (according to merit). First teasers (three to a furnace), 240 francs per month; second teasers, 200 francs per month; third teasers, 170 francs per month; assistants, 100 francs per month. Cutters receive from 125 to 150 francs per month (according to merit); smiths receive from 100 to 125 francs per month (according to merit); day laborers, 3 francs per day.

Statement of cost of material used by window-glass manufacturers.

Kind used.	Cost at mines per ton of 2,240 pounds.	Cost at factory per ton of 2,240 pounds.	Cost dried or cleaned ready for use.	Amount used per melt.	Number of pots in furnace.
	Francs.	*Francs.*	*Francs.*	*Kilograms.*	
Sand, white	5	6.70	8	1,800 to 2,000	
Lime or limestone, ordinary	6.50	7.50	7.50	750	
Sulphate or carbonate of soda, sulphate of soda from Ireland, France and Belgium	.....	75	75	750	
Cullet or old glass, white	50	50	70	300	
Fuel:					
Coal for furnace	10 to 12	11.50 to 13.50	11.50 to 13.50	Tons, 12	
Coal for flattening	13	15	15	1,700 kilograms per day.	
Wood for furnace	.....	.....	.....	None.	
Wood for flattening	.....	.....	.....	do	
Coke for furnace	.....	.....	.....	do	
Coke for flattening	.....	.....	.....	do	

Boxes, cost each at factory: Small size, 1 franc; large size, 4 francs.

BELGIAN WINDOW GLASS.

REPORT BY CONSUL STEUART, OF ANTWERP.

Referring to circular from the Department of State, dated 1st June last, inclosing a series of questions relating to the cost of manufacturing window glass in Europe, I have the honor to reply as follows:

There are no glass industries in this consular district. The factories are situated principally in and around Charleroi, and I have been compelled to rely entirely upon the result of correspondence for the statements that I herewith offer, and which I make as near as possible in the order that the questions were asked.

The number of pots per furnace is generally six, but sometimes (exceptionally) eight. The sizes of the pots average about 3½ to 4 feet high, and from 4 to 4½ feet wide. The average weight of material melted in one pot for each blowing is about 1,300 to 1,400 pounds, con

sisting of sand, 46 per cent.; limestone, 18 per cent.; sulphate of soda, 18 per cent.; and old glass, 18 per cent.

In Belgium coals only are used for fuel; the separate quantities for the blowing and flattening furnaces have not been given to me, but the consumption for both is stated to be about 10 tons a day. The number of rollers for blowing runs from 90 to 100, and sometimes over. The sizes of the rollers vary greatly, say from 70 to 130–140 inches.

There are from 19 to 21 blowings per month, and the product of a furnace of six pots for that time is from 110,000 to 115,000 square feet, single thick, which is equal to 2,200 to 2,750 boxes.

In regard to the prices of labor, I am informed as follows: The blower is paid according to the size and thickness that he makes, and it is after cutting that the glass is divided into four qualities. The wages of the blowers run from $50 to $100, and for some to $150 per month; his assistant receives from $25 to $30; the flattener, $25 to $28; his assistants, from $8 to $15; the cutter, $25 to $30; the founder, (shearer), $30 to $35; his assistant, $28 to $30; engineer, $20 to $25; day laborers, $18 to $20; and blacksmiths, $20 to $25 per month.

All the raw materials used are made or extracted in the neighborhood. Sand costs about $1.10 per ton; limestone, $1.25; and sulphate of soda, about $14 per ton. Old glass has no value for the manufacturer.

JOHN H. STEUART,
Consul.

UNITED STATES CONSULATE,
Antwerp, July 7, 1882.

FLINT AND LIME GLASS IN BELGIUM.

REPORT BY CONSUL WILSON, OF BRUSSELS.

The chief points for the manufacture of glassware in this kingdom are Val-St.-Lambert, Namur, Jumet, and Manage.

All kinds, qualities, and styles of this ware are used here. The cheaper articles of common use are generally pressed; the finer and more expensive blown, and generally afterwards cut.

It is entirely impossible to ascertain the average cost of each article at the place of manufacture. So jealously is this subject guarded that no manufacturer in the kingdom is willing to divulge the cost of his manufactures to another of the fraternity in Belgium, much less to a party he suspects of seeking this information for the purpose of promoting a rival trade. I have tried in vain for several weeks to obtain reliable information on this subject, but have been compelled to give it up in despair.

The usual size of packing cases for ordinary ware, in length and width, is 1½ by 1 meter, and 60 centimeters deep. The cases cost, including packing, from 3½ to 4 francs, according to quality.

Glass and glassware are almost always sold here to parties in the United States, delivered on board at Antwerp. The invoiced price includes 1½ francs per ton for charge at Antwerp, and 6½ francs for freight and charges on railroad from the place of manufacture to that city. The average rated for this class of freight from Antwerp to New York by steamer is 14 francs per ton, but the price paid depends so much on special contract and the competition of carrying lines that these figures can only be regarded as approximative.

The glass and glassware sold in this district for the United States is usually insured in the following manner: The large importing houses in New York have a kind of floating contract with the insurance companies

by which the glass to be received during an entire year is insured at a rate agreed upon; one condition of which contract is that the bill of lading and consular certificate for each shipment shall be presented at the insurance office not later than twelve days after the vessel carrying the merchandise has left the port of embarkment. By this arrangement it will be seen that if a vessel carrying this freight should be lost at any time during the voyage before the arrival of the required documents, the company insuring the merchandise must sustain the loss.

On all purchases made a credit is given of thirty days, with a discount of from 3 to 5 per cent. on accepted bills, generally drawn on bankers in London.

The import duty on glassware is 10 per cent. ad valorem, and the clearance charge is from 1 to 5 francs per package or lot, according to its size or value. All other charges greatly depend on the promptitude with which the merchandise is removed after landing.

There are no laws or regulations in this country discriminating against the United States as compared with any other country.

On the subject of "what I consider the best means of increasing the trade of the United States in other articles" with this country, I beg to submit the following: The manufacture of glass and glassware has long been one of the chief industries of this country, and at no time in its past history has such efforts been made, both by the government and the manufacturers, as are now being made to retain it as such. The transportation of both the raw material and manufactured articles over the railroads and canals of the State is reduced to the lowest possible minimum of cost, whilst the manufacturers, forced by foreign competition, are leaving nothing undone to retain their hold on the home and foreign markets. A degree of economy in manufacture is now practiced by them never known before, and every art and mechanical appliance that can be brought into requisition to reduce the cost of manufacture resorted to. They, moreover, have become so extremely jealous of foreign competition that they guard with the greatest care every new discovery in their craft that in the slightest degree tends to cheapen or improve its products, and seize with avidity every new idea they can obtain from abroad. As an evidence of this fact, I may mention that in seeking the information desired by the Department on this subject, I called on a party in this city who is now making an essay in the sale of some of our manufactures; and amongst his wares I found a lot of pressed-glass goblets made in the United States, which, for appropriate size, style, transparency, and finish are undoubtedly superior to any article of the kind heretofore made and sold in this country at the same price; and this dealer frankly admitted to me that he had quite a large demand for the American goblet, but informed me at the same time that the director of one of the largest glassware manufactories in the kingdom had called and purchased from him samples, not only of this goblet, but of other American glasswares he had on hand, and assured him that he would furnish him, if he desired, the same articles, manufactured at his establishment, for 50 per cent. less than he had paid for his American ware. I mention this case not as an evidence of the ability of the Belgian glassware manufacturers to undersell us here in articles of the same quality, for this I seriously doubt, and am supported in this doubt by a number of experts in glassware, but I give it as an evidence of the difficulties with which our manufacturers have to contend in placing their wares on these markets; and I may further add that there is scarcely one of our new and appropriate articles of this ware sold in this market that is not at once copied and sold by the Belgian manufacturers, often, it is true, at a lower price, but quite as often of an infe-

rior quality. There is, however, in the manufacture of most of our beer glasses and water goblets for this and other continental markets an error made which will continue to prevent their sale unless corrected. The people of Europe generally are not great water drinkers, and find our water goblets altogether too large; but on the other hand, they are great beer drinkers, and complain that our beer glasses are much too small; and I am assured by a number of parties who have unsuccessfully attempted to introduce these articles into general use here that but for these defects they would doubtless have succeeded.

Bad packing is another cause of our failure to successfully place especially our lighter glasswares on these markets. Dealers in our lamps and lamp chimneys in this city declare to me that 30 per cent. would scarcely cover the loss by breakage alone on every lot they receive from the United States.

But the most serious difficulty our manufacturers have to contend with is the want of a proper depot for their wares, and an intelligent and capable man to give his entire time and energies to their recommendation and sale. No merchant here, nor indeed anywhere else, who has upon his shelves a promiscuous collection of the same class of wares from different countries can be expected to enthusiastically recommend any one manufacture of them to the exclusion of the others; for if this should become known he would certainly lose his orders or agency of the neglected parties. Besides this, seeing that not only quality, but traditional forms, and above all cheap prices, will most likely determine his customs in their purchases, and that his profits will be about the same whatever may be the origin of the wares he sells, he cannot be expected to urge the sale of any one class of them so efficiently as he would had he but that one to recommend. The case of the American goblets already mentioned will sufficiently illustrate this fact. This dealer did not hesitate to tell me that if the Belgian parties referred to would indeed furnish him their goblets at the price they promised through their director, he would not hesitate to purchase from them even if the quality should be slightly inferior, as the public rarely judged of a slight difference in quality. There is doubtless much truth in this statement, for the appreciation of superior quality in any class of merchandise is a matter of education; but a cheap or low price is at once understood, and very often determines the purchase. The superior quality of many of our manufactures is freely admitted by honest dealers here, but they say, and frequently with much truth, that they are in many cases not adapted to their trade; and further, that as a rule they cost more than the same class of goods made at home; and this, under our present mode of making foreign sales of our manufactures, is doubtless in many cases also true; and for it I fear there is but little help until our manufacturers devise some mode of placing their wares in this country under their own personal control, or that of a trusty, competent agent, who will be constantly on the ground to study the wants of the markets and devote his entire time to the recommendation and sale of their products. I am aware that the establishment of a conjoint depot for the sale of the merchandise of different manufacturing houses in the United States is a problem somewhat difficult to solve, yet I believe it practicable. But should it be found impracticable, there remains the alternative of establishing in this and other continental cities branch houses of our large manufacturing firms in the United States. There are in this city English, French, German, and Dutch mercantile houses, and yet not a single strictly American house for the exclusive sale of any of our manufactures.

From a careful study of our adaptability to general manufacture, it

is hard to resist the conviction that we ought to largely increase their sale in every city on this continent. The difference in the price of manual labor between Europe and the United States is not enough in itself to shut out our manufactures from these markets; our cheap, crude matter, ingenious machinery, and cheap living for our operatives more than offsets this. With raw cotton in great abundance grown from our soil, and almost at the doors of our cotton factories, we ought to sell cotton manufactures to every foreign country cheaper than any other people, and with lime, sand, lead, and every other element entering into the manufacture of glass and glassware in greater abundance and more easily obtained than in this country, we ought, instead of annually purchasing millions of dollars' worth of these articles from Belgium, to be large exporters of them not only to Belgium but to the entire continent. But to this end several conditions are necessary, each of which is either within the scope of sound commercial legislation or the efforts of our manufacturers themselves. We must have the cheapest possible transportation both by land and sea for this merchandise. Our manufacturers must, for a while at least, be content with much smaller profits than they are accustomed to realize from sales at home; they must pack their goods for these markets with more scrupulous care, and when shipped must either have such a depot or depots as I have here indicated, or, in default of that, establish branch houses of their own for the sale of their special products. If we can sell at a profit the smallest proportion of any class of our manufactures to these people cheaper than they can make them at home, it can only be a matter of time and well-directed effort when we may indefinitely increase these sales, and the magnitude of the prospective prize is well worth serious effort. Below will be found a statement of the exports of glassware from Belgium to foreign countries during the first eight months of this year, by which it will be seen that no less than 3,427,000 kilograms have been sold to foreign nations, nearly 300,000 kilograms of which went to the United States, which fact carries with it its own comment:

Exports of glass from Belgium during the first eight months of 1882.

Whither exported.	Common glass.	Blown and cut glass.
	Kilograms.	*Kilograms.*
Prussia	7,300	134,700
Hamburg	75,400	51,500
Netherlands	162,500	194,500
England	450,000	894,000
France	179,200	.....
Spain	20,000	.....
China	84,900	9,300
United States	99,300	181,700
Brazil	14,400	46,800
Chili and Peru	114,500	83,300
Rio de la Plata	210,500	.....
Turkey	.....	17,000
Other countries	81,500	145,000
Russia	.....	169,000
	1,500,000	1,927,000
Grand total	3,427,000	

JOHN WILSON,
Consul.

UNITED STATES CONSULATE,
Brussels, November 1, 1882.

FLINT AND LIME GLASS MANUFACTURE IN BELGIUM.

REPORT BY CONSUL STEUART, OF ANTWERP.

Referring to my dispatch No. 98, acknowledging the receipt of circular of 31st July last, relating to the manufacture of flint and lime glassware, I have now the honor to offer, as the result of my inquiries, the following replies to the questions contained in said circular:

First. The glassware that is received here for shipment is manufactured principally in Belgium; a small portion, however, comes from Germany and the French border.

Second. All articles of glassware are in use, some are pressed, and some are blown.

Third. To this question, demanding the first cost of the articles at the point of manufacture, it is impossible for me to reply. Every business man will readily understand that no manufacturer will give to the public the prime cost of articles that he puts for sale upon the market, and I cannot consider any answer that may be given as correct or to be relied upon.

Fourth. The size of the packages varies of course according to the articles they must contain; but the cost may be estimated at from $1 to $1.25 per package. In very fine goods the cost of packing is comparatively trifling, but in goods of little value it is of considerable importance.

Fifth. The rate of freight per steamer is 10*s.* and 10 per cent. per 40 cubic feet, and the rate of insurance is one-half per cent., free particular average.

Sixth. The terms of payment are from three to four months, or cash with a discount.

Seventh. The duties are 10 per cent. ad valorem, and the landing and custom expenses will not exceed 3 per cent.

Eighth. There are no laws or regulations discriminating against articles manufactured in the United States as compared with any other country.

In regard to the best means of increasing the trade of the United States with this port in the above articles, I have consulted the opinions and experience of those who have made the experiment of importation, and I find the following complaints made against the manufacturers in the United States, namely: Very careless packing, whereby a heavy breakage is caused; a reluctance or refusal on their part to make the style of goods demanded here, and of which samples had been sent; and again that goods would not arrive according to the time specified in the contract, thereby vitiating contracts made for their delivery here.

An agency for the sale of American manufactures established in this city informs me that they were the first to import into Belgium the American tumblers and beer mugs, and that as the quality of the goods was much better than those manufactured here, a good business could have been done but for the reasons mentioned above. Samples of wine-glasses and other ware had been sent by them to show the styles needed for this market, but the manufacturers took no notice and made no reply. It is a difficult thing to compete successfully in glassware with such a large glass manufacturing district as Belgium, and to

endeavor to do so it is absolutely necessary to furnish goods of the styles demanded, of superior workmanship, and at low prices, so that their superiority, and cheapness can be readily made manifest to the dealers, and also to have an agent, competent and reliable, who will present and push the goods. Any manufacturers wishing to build up a trade, and who will give careful attention to the details required here, can soon find a suitable agent to act for them.

JOHN H. STEUART,
Consul.

UNITED STATES CONSULATE,
Antwerp, October 6, 1882.

WINDOW-GLASS MANUFACTURE IN FRANCE.

REPORT BY CONSUL-GENERAL WALKER.

Referring to the Department's circular of June 1, 1882, inclosing a series of questions relating to the cost of manufacturing window glass in Europe, I have the honor to state that having written for information on this subject to the several leading glass manufacturers in France, I have been able to obtain only one answer to my letters of inquiry. The other glass manufacturers have declined to give the information requested, on the ground that the disclosure of their way of conducting their business might cause serious prejudice to themselves and to other people engaged in the same trade. I have endeavored, however, to procure as much information as I could, and transmit herewith my report, containing—

1. A translation of the statements made in answer to my inquiries by an important manufacturer in the north of France, whose name is withheld by his desire.

2. Extracts from a valuable and interesting treatise on the manufacture of glass, by Mr. G. Bontemps, published in the year 1868. These extracts may be serviceable in a retrospective point of view for a comparison of the present condition of glass factories in France with their condition in 1868.

3. A statement showing the average daily earnings of persons employed in window and other glass factories in France during the year 1881. This statement was laid before the French Chambers in the session of 1882.

4. Statements showing imports into and exports from France of window glass for the year 1880.

GEORGE WALKER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Paris, France, July 31, 1882.

Statistics of a French window-glass factory for the year 1881.

[Transmitted by a window-glass manufacturer of the North of France.]

Number of furnaces, 1.

Number of pots per furnace, 8.

Size of pots: Upper diameter, 1.10 meters (43.31 inches); lower diameter, .92 meter (36.22 inches); interior height, 1.12 meters (44.09 inches).

Average weight of material melted per month, 105,000 kilograms.*

Coal used each melt, 265,860 kilograms.

Coal used for flattening for one furnace, 60,000 kilograms.

Number of blowings per month, 21 blowings.

Usual size of rollers, from .75 meter to 2.15 meters (29.53 to 84.65 inches) long.

Number of rollers made at each blowing, 800 to 820 rollers.

Number of boxes of 27 square meters (291 square feet) packed monthly, 600 boxes.

Cost of a box at factory, $5.21.

Cost of material used.

Material.	Where from.	Cost at mines per 100 kilograms.	Cost at factory per 100 kilograms.	Amount used each melt.
				Kilograms.
Sand	Creil, near Paris	$0 82	$1 32	2,500
Limestone	Belgium	1 25	1 50	1,000
Sulphate	North of France		1 54	1,040
Coal for furnace	Belgium and France		2 48	12,600
Old glass				500

COST OF LABOR.

		Per month.
1 master stoker, night work		$37 64
1 master stoker, day work		34 74
1 smelter		32 81
2 smelter's assistants	each	23 16
1 potmaker		28 95
1 potmaker's assistant		18 34
2 glass composition makers	each	17 37

Blowers are paid 9.6 cents per 12 kilograms of glass ready to work.

2 blower's assistants, first hand	each	$32 81
2 blower's assistants, second hand	each	27 02
4 blower's assistants, third hand	each	22 20
3 flatteners, first hand	each	27 02
1 flattener, second hand		25 09
1 flattener, third hand		17 37
2 flattener's assistants	each	8 69
5 shovers	each	5 79
1 overseer of the cutting department		28 95
1 cutter, first hand		23 16
1 cutter, second hand		22 20
1 packer	per box of any size	39
1 boxmaker	do	39
1 carpenter	per day	58
3 laborers	do	58

*1 kilogram = 2.2046 pounds avoirdupois.

Average expenses of running a furnace during thirty days.

[Computed from a period of eighteen months (October 31, 1879, to May 31, 1881), deducting fifteen days employed for repairing.]

Description.	Cost.	Cost per box of 201 feet.
Bricks for furnace and material for pots; salaries of furnace-builders and of pot-makers	$138 11	$0.213
Material for glass-making	511 92	.789
Cost of labor (smelting, blowing, flattening, cutting)	1,313 33	2.026
Fuel	806 73	1.244
Wood for boxes; box-maker's salary	219 19	.337
Stable, packing, and salaries	68 09	.105
Polishers for flattening	5 82	.009
Blocks for blower's use	20 74	.032
General expenses	152 48	.235
Banking expenses	3 78	.006
Wood for miscellaneous uses	3 64	.006
Blacksmith's department and salaries	42 55	.066
Profit and loss, interest on capital	32 15	.049
Total	3,319 13	5.118

There were 752,328 sheets of glass flattened from October 31, 1879, to May 31, 1881; of these, 22,237 sheets or 2.95 per cent. of the total quantity were broken in packing.

STATISTICS OF A WINDOW-GLASS FACTORY FOR THE YEAR 1868.

[Extracts from the "Guide du Verrier," by Mr. G. Bontemps.]

Number of furnaces, 3.

Number of pots per furnace, 8; containing each from 400 to 600 kilograms of material.

Size of pots: Upper diameter, 70 centimeters (27.56 inches); lower diameter, 54 centimeters (21.26 inches); interior height, 64 centimeters (25.20 inches).

Average cost of pots: The average cost of one pot is about $5.98. (Pots generally last one month.)

Production per pot: The net production of one pot, per each melt, amounts to 120 single sheets of 69 by 54 centimeters (27.16 by 21.27 inches), weighing 2 kilograms each; or to 60 double sheets of 114 by 69 centimeters (29.53 by 20.08 inches), weighing 4 kilograms each.

Number of blowings: The average number of blowings is 25 per month, for a production of 24,000 sheets weighing 48,000 kilograms.

Usual size of the rollers: The usual size of rollers used in France, since the year 1861, is as follows:

	Inches.
69 by 66 centimeters	27.16 by 25.99
72 by 63 centimeters	28.35 by 24.80
75 by 60 centimeters	29.53 by 23.62
81 by 57 centimeters	31.89 by 22.44
87 by 54 centimeters	34.25 by 21.26
90 by 51 centimeters	35.43 by 20.08
96 by 48 centimeters	37.80 by 18.90
102 by 45 centimeters	40.16 by 17.72
108 by 42 centimeters	42.52 by 16.54
114 by 39 centimeters	44.88 by 15.36
120 by 36 centimeters	47.24 by 14.17
126 by 33 centimeters	49.61 by 12.99

Number of rollers made per hour: A blower makes per hour from 9 to 10 rollers of 111 by 69 centimeters (43.70 by 27.16 inches), or from 16 to 17 rollers of 69 by 54 centimeters (27.16 by 21.27 inches).

Coal used: The quantity of coal used for manufacturing 100 kilograms of window glass ready to work is as follows:

	Kilograms.
For melting	235
For blowing	42
For flattening	63
Total	340

of which the average price, at the rate of $3.86 per 100 kilograms, would be 13.12.

Wood used: As wood is getting dearer every day in France, on account of the decrease in the production of French forests and of the increase in its consumption for other purposes, it is now very little used in France for the manufacture of glass.

Cost of material used: The proportion and cost of material used is as follows:

100 kilograms of sand, at the rate of 19.3 cents per 100 kilograms	$0.193
36 kilograms of sulphate of soda, at the rate of $2.509 per 100 kilograms	.903
35 kilograms of carbonate of lime, at the rate of 38.6 cents per 100 kilograms	.135
0.5 kilogram of manganese, at the rate of $2.702 per 100 kilograms	.012
0.5 kilogram of arsenic, at the rate of $9.65 per 100 kilograms	.048
Coke or charcoal	.010
Total	1 30

As these 172 kilograms of material are reduced by melting to 137 kilograms, the price of 100 kilograms comes to 9.51 cents. In adding to this price the cost of the material wasted by its overflowing from the pots, the cost of glass broken during the blowing and flattening process, and the wages paid to the men employed in making the glass composition, the total cost price of the material used for manufacturing 100 kilograms of window glass ready to work amounts to $1.08.

COST OF LABOR.

	Per annum.
1 superintendent	$1,544
1 overseer of the smelting department	290
1 overseer of the flattening department	290

SMELTING.

	Per day.
1 master smelter or stoker at	$0 87
2 smelter's assistants, each at	72
2 common hands, each at	48

BLOWING.

The cost of labor for blowing (including wages paid to helpers, boys) amounts to about $0.019 per sheet of ordinary size, or $2.32 for 120 sheets weighing 240 kilograms. Blowers for large sizes are often paid by the month, from $67.55 to $86.85, and sometimes $96.50.

FLATTENING.

	Per month.
2 flatteners, each at	$27 02
2 helpers, boys, each at	6 75
2 glaziers' cast attendants, each at	12 55

CUTTING.

	Per month.
1 cutter, first hand	$27 02
1 cutter, second hand	23 16
1 helper boy	7 72

PACKING.

	Per month.
1 packer	$23 16
1 helper boy	7 72
1 carpenter	27 02
1 blacksmith	27 02

Résumé of the cost price of manufacturing 100 *kilograms of window glass.*

Description.	Cost.	Per cent. of the total cost.
1. Furnace (12.5 cents) and pots (6.4 cents)	$0.189	3.49
2. Material	1.081	19.94
3. Fuel	1.312	24.23
4. Smelting, cost of labor	.170	3.13
5. Blowing, cost of labor	.965	17.81
6. Flattening, cost of labor	.502	9.26
7. Storage and cutting expenses	.154	2.85
8. Packing	.500	9.23
9. Carpenter's and blacksmith's work	.077	1.42
10. Rent, taxes	.149	2.73
11. General expenses, directions, interest on capital	.320	5.92
Total	5.419	100.00

The total quantity of window glass manufactured in France during the year 1868 was estimated at about 7,000,000 square meters (8,372,233 square yards), viz, 2,600,000 square meters (3,109,686 square yards) produced by the glass factories near Lyons (Rive de Gier, Gisors); 3,000,000 square meters (3,588,100 square yards) by factories in the north of France (Anzin, Fresnes, &c.); and 1,400,000 square meters (1,674,447 square yards) by factories in other parts of France.

These 7,000,000 square meters, weighing 31,000,000 kilograms, represent a value of about $2,220,000.

The material used amounted to 24,000,000 kilograms of sand, 10,000,000 kilograms of sulphate of soda, 10,000,000 kilograms of carbonate of lime, 140,000,000 kilograms of coal.

There were employed 520 blowers, 520 helpers (boys), 130 flatteners, 340 smelters, potters, shearers, &c., 140 cutters and packers, 250 blacksmiths, carpenters, day laborers, &c.; total, 1,900 persons, earning a salary of $579,000.

WAGES IN 1881.

Statement showing the average daily earnings of persons employed in window and other glass factories in France during the year 1881.

[Laid before the French Chambers in the year 1882.]

Overseer	$1 35
Engineers, machinist, foremen, &c	70
Laborers, common hands	51
Workmen	1 09
Lads, from 15 to 21 years of age	57
Women	29

The average number of working days is 308 per year.

WINDOW-GLASS IMPORTS, 1880.

Statement showing the quantities and values of window glass imported into France during the year 1880.

Whither imported.	Quantities.	Values.
	Kilos.	
Germany	75,491	$4,227
Belgium	890,530	49,870
England	337,398	18,894
Other countries	6,577	368
Total	1,309,996	73,359

WINDOW-GLASS EXPORTS, 1880.

Statement showing the quantities and values of window glass exported from France during the year 1880.

Whence exported.	Quantities.	Values.
	Kilos.	
Russia	15,181	$850
Germany	22,997	1,288
Belgium	1,934,459	106,339
England	70,062	3,923
Spain	152,312	8,529
Italy	364,202	20,395
Switzerland	301,463	16,882
Turkey	114,172	6,394
Egypt	60,973	3,414
Equator (republic of the)	3,431	192
Algeria	492,610	27,586
Other countries	104,412	5,847
Total	3,636,275	203,630

FLINT AND LIME GLASS MANUFACTURE IN FRANCE.

REPORT BY CONSUL-GENERAL WALKER, OF PARIS.

In answer to Department's circular of July 31, 1882, inclosing a series of questions "relating to flint and lime glass manufactures of foreign countries," I beg to submit herewith all the information on the subject which I have been able to obtain.

1. The glassware which is received and sold in Paris is almost entirely manufactured in France, although some Bohemian ware is sold in this market. It is, however, generally understood that the French wares are the principal commodities of traffic.

2. All articles of glassware in this market are pressed or blown, and it is difficult to say which has the precedence.

3. The average cost of articles of glassware at the place of manufacture is from 25 centimes (about 5 cents), to 2.50 francs (or a little more than 48 cents) per kilogram (2.205 pounds); the price per dozen cannot be obtained on account of constant changes of patterns, designs, &c.

4. The average cost of packages is about 15 francs per cubic meter, and the average size of same is about one cubic meter.

5. Rate of freight and insurance: Freight from Havre to New York varies from 20 to 30 francs per cubic meter, and insurance is one-half of one per cent., the freight on glass being less than on heavier goods.

6. Terms of payment with the majority of manufacturers is 60 days.

7. For duties on glassware coming into France, see French general tariff of May 8, 1881. The custom house and landing expenses outside of the duties are merely nominal.

8. The United States having no commercial treaty with France, merchandise coming from that country is classed in the general tariff.

In answer to the last clause of the circular in regard to the best means of increasing the trade of the United States with France, I beg to suggest that the present general tariff on glassware imported into France from the United States may be so burdensome as to make such imports unprofitable to the exporter. For instance, the duty on "goblets, simple and molded or pressed, white or tinted throughout one color, 4.25 francs (82 cents) per 100 kilograms; goblets cut or engraved in any other manner than is necessary for effacing the mark of the 'pontil,' 12.50 francs ($2.41) per 100 kilograms; goblets decorated in gold or colors, 31 francs ($5.98) per 100 kilograms."

I may also properly mention that there is a strong hostility among the French manufacturers and dealers against the introduction of American wares, growing not only out of the fact of competition, but because some of the manufacturers in the United States have copied the designs of French manufacturers, as is claimed, greatly to the detriment of the latter.

In the prosecution of the inquiries necessary to this report, I have been met by complaints of this character. The following is an example of these complaints:

Four or five years ago one of the largest glass manufacturers in France, the "Compagnie des Cristalleries de Baccarat," put upon the market a new fashion of vases made of colored glass, the designs of which were very expensive. These vases had a large sale both in France and in the United States, especially in the latter country. A few months later a gentleman from Boston purchased at the warehouse of this company in Paris samples of each of these vases. After a few months the sale of the French article ceased in the United States, and it was ascertained that the Boston buyer, being a manufacturer, had copied the designs of the vases in question, and thereby secured the whole American trade, to the serious injury of the company referred to above.

The same company complain that many patterns of their stem ware have been duplicated in the United States. Similar complaints come from other manufactures. I am quite aware that this species of imitation is within the usual limits of manufacturing competition, but think it proper to say that the cases mentioned have created a prejudice against American glass products, among both manufacturers and dealers in France, which will make the introduction of American ware more difficult than it might otherwise be.

GEORGE WALKER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Paris, France, September 21, 1882.

GERMAN WINDOW GLASS.

REPORT BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE-MAIN.

Pursuant to Department circular of June 1, 1882, I have made inquiry into the cost of manufacturing window glass in Germany, but am compelled to admit that my investigation has not resulted in such general information on the subject as I had desired.

I have received answers to the questions propounded by me from only one manufacturing establishment, viz, "Verein Rheinischer Tafel-Glas-Hütten" (Association of Rhenish Plate Glass Furnaces) at Saarbrücken.

These questions and answers are as follows, viz:

Number of pots per furnace, 8 to 12.

Size of pots, 140 to 180 cubic feet.

Average weight, material melted, 8,000 to 9,000 square meters per month and furnace.

Coal used each melt and blowing, 15 tons.

Coal used each week for flattening for one furnace, 30 to 40 tons.

Daily product of glass ready to work, 5,000 to 6,000 pounds.

Number of blowings per month, 17 to 20.

Usual size of rollers, one square meter.

Number of rollers made per blowing, 400 to 500.

Blowers' wages, $4.76 per 100 square meters, 4–4; $9.52 per 100 square meters, 8–4; assistants, $9.52 to $42.84 per month; flatteners, $21.42 to $35.70 per month; shover assistants, $9.52 to $11.90 per month; cutters, $19.04 to $28.56 per month; master-shearer to run furnace, $23.80 per month; assistant shearer, $21.42 per month; engineers, $28.56 per month; day laborers, 48 to 71 cents per day; blacksmiths, 48 to 95 cents per day.

Cost of material.—Cost at mines per ton of 2,240 pounds: Sand, $3.57; lime or limestone, $3.33; sulphate or carbonate of soda, $19.04; carbonate, $40.46 to $47.60; cullet or old glass, $9.52.

Boxes: Cost each at factory $1.67 to $2.38 per fifty foot box.

Amount of coal for furnace, 250 tons per month. Amount of coal for flattening, 150 tons per month.

FERDINAND VOGELER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Frankfort-on-the-Main, September 26, 1882.

GERMAN GLASSWARE MANUFACTURES.

REPORT BY CONSUL-GENERAL BREWER, OF BERLIN.

In compliance with circular instructions dated July 31, 1882, relating to the manufacture of glassware in this consular district, I beg leave to submit the following:

Question. Where is the flint and lime glassware manufactured that is received at your port?

Answer. In Bohemia, Silesia, and the Rhine provinces. So far as I can learn there are no glass manufactories in this consular district.

Question. What articles of glassware are used, and are they pressed or blown?

Answer. All kinds of glassware are kept by the merchants.

Question. What is the average cost of each article at the point of manufacture?

Answer. I cannot say; we tried to procure the information sought for in your circular, and wrote to several manufactories of glassware in Bohemia, Silesia, and other places, but they were generally unwilling to give information, as they seemed to think it might in some way affect their own business unfavorably.

Question. What is the cost of packages and size of same?

Answer. These manufacturers inform me that that depends entirely upon the quality of the goods.

Question. What are the rates of freight and insurance?

Answer. One firm states the rate of freight to be 83 cents per 100 kilograms (=220.46 pounds), and the rate of insurance at one per $1,000.

Question. What are the terms of payment?

Answer. Correspondents inform us that terms of payment depend entirely upon the agreement of parties; sometimes cash down, sometimes two months, sometimes three months.

Question. Are there any duties, and what are the custom-house and landing expenses?

Answer. The rate of duty is fixed by law as follows:

X.—GLASS AND GLASSWARE.

a. Green and other natural colored common hollow glass, neither pressed, cut, nor polished; also covered with wicker of willow, broom-straw or rushes; glass metal; raw optical glass (flint crown glass), raw ribbed glass plates; roof-glass enameling and glazing material; glass tubes and rods without distinction of color used for glass beads and fancy blowing glass, per 100 kilograms, 71 cents.

b. White hollow glass, not figured, uncut, not ground, not pressed, or only with finished stoppers, bottoms, or brims, per 100 kilograms, $1.90.

c. Window and sheet glass in its natural color (green, partly or entirely white), uncut, not figured; if the single length and single breadth taken together measure:

1. Up to 120 centimeters, 100 kilograms gross, $1.42.
2. Above 120 to 200 centimeters, 100 kilograms gross, $1.90.
3. Above 200 centimeters, 100 kilograms gross, $2.38.

d. 1. Mirror glass, raw, not cut, 100 kilograms, $0.71.

2. Plate (window) and mirror glass, cut, polished, figured, ground, also colored and overlaid, 100 kilograms gross, $5.71.

e. Ornaments for glass chandeliers; glass buttons, also colored; solid white glass not specially mentioned; pressed, polished, ground, cut, etched, figured, not included in *d* or *f*, 100 kilograms, $5.71.

Note to e.—Small glass plates, glass beads, enamel drops; also colored, 100 kilograms, $0.95; if colored, with exception of what is included in *a*, *d*, and *e*, painted or gilded (silvered) glass; glass pastes (imitations rare of precious stones) not set, glassware and enamel goods combined with other materials not belonging to No. 20 of the tariff (amber, celluloid, agate, jet, lava, meerschaum, tortoise-shell, &c., 100 kilograms, $7.14.

Note to f.—Milk glass and alabaster glass, not figured, not cut, not ground, not painted, not pressed, or only with finished stoppers, bottoms or brims, 100 kilograms, $2.38.

Question. Are there any laws or regulations discriminating against articles manufactured in the United States, as compared with other countries?

Answer. I think not. The German tariff act, approved July 15, 1879, contains, however, the following:

SECTION 6. On goods coming from countries that treat German vessels or goods of German origin more unfavorably than the vessels or goods of other nations, no treaty stipulations to the contrary, an additional duty not exceeding 50 per cent. of the amount of duty prescribed in the tariff in pursuance of this act, may be imposed. Such additional duty shall be levied by imperial decree, by and with the consent of the federal council.

As I have stated in former dispatches the people here are very unwilling to divulge their business affairs, and I find it very difficult to gather information, much more difficult than formerly.

M. S. BREWER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Berlin, September 16, 1882.

GERMAN GLASS MANUFACTURE.

REPORT BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE MAIN.

In spite of diligent inquiry I have been unable to obtain such information concerning the trade in glassware in Germany as I had desired. The questions which I propounded to dealers and manufacturers of glassware were answered by some in a very superficial and unsatisfactory manner, while others refused altogether to answer. In order, however, that my report may be no longer delayed I subjoin such facts, figures, and information on the subject as I have been able to obtain.

I beg to submit that the articles concerning which I was instructed to inquire, viz, lamp-chimneys, bowls, dishes, mugs, caster-bottles, bar-bottles, bread-plates, cream-jugs, celeries, globes, shades and founts, goblets, tumblers and glasses, pickle-jars, round and oval dishes, sugar-bowls, inkstands, molasses and sirup jugs, pitchers, spoon-holders, salts, champagnes, clarets, wines, and other varieties of stem ware, are all or nearly all manufactured in such endless variations of material, size, form, color, and finish that it is next to impossible to ascertain the price of even the leading shapes, sizes, and kinds thereof. The sources from which these and other articles of glassware are brought into Germany, besides such as are manufactured in the empire itself, are France, Belgium, Austria, and England. As a general thing it may be said that the ordinary and usual household articles handled by the trade in Germany are of crystal glass, either plain, pressed, or cut. The fancy articles, such as bowls, decanters, mugs, &c., are often made of plain as well as decorated colored glass. The manufacturer ships his goods, according to the quality, in smaller or larger packages, the cheaper goods in barrels and casks, the finer goods in good strong boxes and cases. The boxes used for packing range from 28 inches in length, 22 inches in breadth, and 27 inches in height, to 48 inches in length and 30 inches in breadth and height. The medium size of the barrels used is of the height of about 46 inches and the diameter of about 36 inches. The price of the boxes first described is about 3.50 marks or 84 cents, that of the boxes next described 6.50 marks or $1.56, and that of the barrels 6 marks or $1.44. The price of freight and insurance cannot be given, inasmuch as the goods come to Germany from almost all the adjacent countries, and the distances differ in every case. The terms of payment agreed upon by the German purchaser and the foreign or domestic manufacturer usually are three or four months from date of invoice, with a discount of 2 to 2½ per cent. for cash. As to the duty imposed by the empire of Germany on glassware I can give the following accurate information: It is per 100 kilograms (220 American pounds):

1. On ordinary green hollow glassware, neither pressed nor cut, 3 marks, or 72 cents.

2. On white hollow glassware, which is neither pressed nor cut, nor ornamented except on the edges, bottoms, or stoppers, 8 marks, or $1.92.

3. On ornamented glassware, cut, pressed, polished or ornamented, such as ornaments for chandeliers, glass beads, buttons, ear-drops, &c., 24 marks, or $5.76.

4. On colored, ornamented, engraved, silvered, and gilded glass (except such articles as come under the class last above described), such as vases, imitation stones, glassware in conjunction with enameled goods, &c., 30 marks, or $7.20.

Of course it is often difficult to determine under which of the four classes above given, a certain article of glassware should be entered, and great latitude is given, or rather assumed by the German customs officers. It will be advisable, therefore, for the American shipper to study closely the German tariff law, or if that cannot be done, to confer beforehand with his German customer with reference to the manner in which the goods are to be invoiced, in order that he may not be charged by his customer with having caused his manufactures to be entered at a higher rate of duty by a misnomer or an improper classification of the goods. Excepting the uncertainty caused by the tendency of the customs officers of Germany to place the goods imported into a higher class than that to which they naturally belong, a practice to which I have called the attention of the Department in a previous report, the tariff of Germany is well adjusted and of uniform application.

Inasmuch as Germany has lately entered into competition with the United States in the manufacture of bottles, I have obtained the prices of different kinds and sizes of bottles at the factory, as well as the wages paid and prices of material and packing, all of which I subjoin.

The price of bottles at a leading factory is, per 100 pieces:

1–1 ordinary Bordeaux bottles, weighing 1.20 pounds	$1 44
½ ordinary Bordeaux bottles, weighing 0.88 pound	1 20
1–1 heavy bottom Bordeaux bottles, weighing 1.43 pounds	1 56
1–1 green Rhine wine bottles, weighing 1.37 pounds	1 56
½ green Rhine wine bottles, weighing 0.84 pound	1 15
1–1 brown Rhine wine bottles, weighing 1.58 pounds	1 68
½ brown Rhine wine bottles, weighing 1.10 pounds	1 44
1–1 ale bottles, weighing 1.60 pounds	1 62
½ ale bottles, weighing 1.06 pounds	1 38
Beer bottles, containing ½ liter, 0.88 pound	1 20
Beer bottles, containing ½ liter, 1.10 pounds	1 38
1–1 seltzers bottles, weighing 1.32 pounds	1 50
½ seltzers bottles, weighing 0.99 pound	1 26

The glass-blowers work by the piece, and receive 5.25 marks, or $1.26, for either of the following number and kinds of bottles blown, viz:

390 pieces 1–1 ordinary Bordeaux bottles.
460 pieces ½ ordinary Bordeaux bottles.
370 pieces 1–1 heavy bottom Bordeaux bottles.
370 pieces 1–1 green Rhine-wine bottles.
440 pieces ½ green Rhine-wine bottles.
340 pieces 1–1 brown Rhine-wine bottles.
420 pieces ½ brown Rhine-wine bottles.
350 pieces 1–1 ale bottles.
420 pieces ½ ale bottles.
460 pieces ⅓ liter beer bottles
390 pieces ½ liter beer bottles
360 pieces 1–1 selters bottles.
440 pieces ½ selters bottles.

The wages of the firemen employed average 90 marks, or $21.60 per month; the tenders receive 80 marks, or $19.20 per month; the mixers 64 marks, or 15.36 per month; the carrier boys 30 marks, or $7.20 per month. The ordinary workmen, of whom about 10 are usually employed at each furnace, are paid about 40 marks, or $9.60 per month. Bottles are usually packed and shipped in crates. The usual price of a crate is 1.20 marks, or 30 cents. The straw necessary for packing a crate costs about 0.20 marks, or 5 cents. Straw costs 20 marks, or $4.80 per 600 kilograms, or 1,320 American pounds; sulphate, 6 marks, or $1.44, per 100 kilograms, or 220 American pounds; and sand 2.40 marks, or 58 cents, per ton.

The freight for glassware from this (central) point of Germany to Bremen or Hamburg is about 5 marks, or $1.20, per 100 kilograms, or 220 American pounds, while freight by river from here to Rotterdam is only 1.80 marks, or 44 cents, per 100 kilograms for the same class of goods. The freight from the European ports to New York averages 7.50 marks, or $1.80 per cubic meter (one meter 3 feet 3½ inches American measure).

As to the manner of introducing American manufactures of glass in Germany, I submit that the beginning should be made by sending regular sample collections to the Leipsic fair in the spring, there to be exhibited side by side with the goods of French, English, German, Austrian, and Belgian manufacturers. In that manner the American manufacturer would become acquainted with the German market, would have his manufactures scrutinized, criticised, examined, and would learn to conform himself to the European demand and taste. He would no doubt attract the attention of the German dealer, would receive some orders, and could thus gradually introduce his goods into Germany. If he can compete, as to the price and tastefulness of his goods, with other foreign manufacturers, he will not fail to do business by reason of any prejudice against American goods; on the contrary, the faithfulness, promptness, and largeness, if I may use the expression, of the American merchant and manufacturer is universally conceded.

Respectfully submitted.

FERDINAND VOGELER,
Consul-General.

FRANKFORT-ON-THE-MAIN,
December 5, 1882.

GLASS MANUFACTURE IN BRUNSWICK.

REPORT BY CONSUL FOX.

All kinds of glassware, cut, blown, and pressed, are used here. The more common articles are manufactured in the immediate vicinity. The factories in the imperial provinces (Alsace and Lorraine) have, in later years, made notable progress in the production of so-called "half crystals"; these goods are of excellent quality and of artistic workmanship; they are manufactured in different styles, cut as well as pressed. Silesia and Bohemia produce a very substantial article, though differing in character from those of Alsace and Lorraine. Owing to increased duties, the business with Bohemia has been rendered difficult. Richly cut and engraved crystal drinking services, formerly extensively imported from France, Belgium, and England, are now satisfactorily

manufactured in Germany. Public taste has changed somewhat in regard to this class of goods, and appears to prefer high antique glasses and bumpers of variegated colors, imitations of the mediæval styles, which are extensively used for decorative as well as practical purposes. For this ware Bohemia has decidedly the best reputation. Germany cannot, therefore, at present wholly dispense with her. In regard to the importations from the United States, I beg to refer to the following, taken from the report of the Hanover Handelskammer for 1879:

In making even an approximately complete report of the glass industry we dare not forget that for some short time past North America has supplied us with an excellent quality of pressed glassware, which for purity of material and elegance of finish has no equal. This glassware, in large quantities, has found its way to the German market, where it meets with ready sale and enjoys the well-earned plaudits of consumers.

If I am correctly informed, the introduction of the articles above referred to is mainly due to the efforts of a gentleman residing in Hanover, who is engaged in the importation of goods from the United States. This gentleman succeeded in placing various lots of beer glasses of Pittsburgh manufacture, which came at once into favor, so much so that they are now extensively imitated by German manufacturers. I have taken occasion to examine these imitations; they do not bear comparison with the Pittsburgh glass; the execution is faulty and the material has a peculiar bluish taint which even an unpracticed eye must regard as defective. I understand that the German manufacturers are devoting particular attention to their perfection, in order, if possible, to wholly drive off American competition. The American beer glasses cost, delivered, about 72 marks (=$17.14) per 100; the German is placed at 36 marks (=$8.57). I am unable to find out exactly what success the German manufacturers have attained with their imitations. I hear on one side that, even considering the great difference in price, the superiority of the American article keeps it in demand; on the other, that the Germans have now the whole field, and that the American goods have been completely shut out. Let this be as it may, it is evident that the American glass manufacturer can hold his own in Germany only by delivering goods of the very first quality. As stated above, it was their superiority which gained them a foothold in the first place. A circumstance which will in a measure, in the near future, cause an increased demand for pressed ware is that after January 1, 1883, all public drinking houses will be required to use gauged glasses. Pressed glasses all of like size can be gauged here for 20 cents a hundred. Blown glasses varying in size will cost much more to gauge, and such as fall short of the standard will be useless.

In reply to the interrogatories propounded by the Department: The duty on cut glass is 12 marks ($2.85) per centner (110 pounds); pressed, 8 marks ($1.90); colored, 15 marks ($3.57); smooth, 4 marks (95 cents). Glassware from the United States pays the same duty as that which comes from other foreign countries. The prices vary according to qualities and the situation of the market. Manufacturers of cheap glassware are said to make but small profit. Cheap ware is packed in crates of various sizes, the crates themselves being returned from the immediate vicinity; freight is very low and generally no insurance is effected. American goods are generally sold free to Bremen or Hamburg. Freight, packing, and other expenses on glassware imported from France, Belgium, and England average 25 per cent. The home manufacturer concedes three months', the foreign thirty days' credit. I unhesitatingly assert that there will always be a market in Germany for American glassware. The specific duty will prevent profitable importation of heavier lines, and our folks will undoubtedly have to contend with the hobby of imitation

which our German cousins have; though harassing, we must look upon it as legitimate competition. It will be the aim of our manufacturers to keep on continually improving. Especial attention should be paid to the form; in fact, elegance should be courted. The expression "Billig und schlecht" should not, in my opinion, be applied to glassware. It might be well to import samples from here for the purpose of comparison, not for imitation. Originality is our country's best card.

WILLIAM C. FOX,
Consul.

UNITED STATES CONSULATE,
Brunswick, September 27, 1882.

FLINT AND LIME GLASS MANUFACTURES IN GERMANY.

REPORT BY CONSUL WILSON, OF BREMEN.

In answer to your circular letter of July 31, relating to flint and lime glass manufacturers, I have to report as follows:

1st. The glassware received and used at this port is manufactured principally in Germany, and generally comes from the extensive manufactories at Ernfeld, near Cologne, from Radeberg, in Saxony, and Wadgassen, on the Saar, and from Bohemia. A small percentage, namely, that of the finest ware, comes either from France or England. Now and then is also seen some of the cheaper grades of pressed ware from the United States.

2d. Bottles, lamps, lamp-chimneys, lamp-globes and shades, bowls, dishes, plates, beer-glasses, mugs, caster-bottles, bar-bottles, water-bottles, bread-plates, cream-jugs, pitchers, celery-glasses, founts, goblets, tumblers, glasses, pickle-jars, round, oval, and square dishes, sugar-bowls, inkstands, salts, champagne, claret, Rhine-wine glasses, &c. The cheaper grades of these goods are pressed, as are also those that are in general use. Only the finer qualities of crystal glass, so called, are blown.

3d. As near as can be ascertained, the cost of the above-mentioned articles, according to quality, at the manufactory, is as follows:

Lamp-chimneys	per dozen..	$0 07 to $0 36
Bowls	do....	13 to 2 57
Dishes	per 100..	5 35 to 96 39
Mugs	do....	13 33 to 83 30
Caster-bottles	do....	16 60 to 24 99
Bar-bottles	do....	5 00 to 83 30
Bread-plates	do....	4 89 to 96 39
Cream-jugs	do....	2 50 to 4 40
Celeries	do....	2 50 to 6 24
Globes	per dozen..	42 to 2 00
Shades and founts	per 100..	26 to 6 66
Goblets	do....	1 07 to 2 92
Tumblers, glasses	do....	2 50 to 83 30
Pickle-jars	do....	1 58 to 10 00
Round and oval dishes	do....	4 89 to 9 64
Sugar-bowls	uo....	28 86 to 59 98
Inkstands	do....	1 25 to 5 00
Molasses and sirup jugs	do....	2 67 to 5 00
Pitchers	do....	10 71 to 24 99
Salts	do....	1 25 to 2 10
Champagne glasses	do....	2 50 to 16 13
Claret-glasses	do....	1 47 to 2 94
Wine-glasses	do....	2 50 to 4 17
Water-bottles	do....	4 17 to 12 50

4th. The goods are usually packed in boxes in size according to the amount of goods desired to be packed. The price of these boxes, including packing of hay or straw, is, for a box of the contents of one cubic meter, 95 cents; smaller and larger ones in proportion. No allowance is made for breakage, excepting on lamps and parts thereof. The allowance granted on this class of goods is 2 per cent. on amount of shipment. Boxes and packing materials, returned to the manufacturers, if in good condition, are taken back at the rate of two-thirds of original cost.

5th. The rate of freight, insurance, &c., amounts to about 10 per cent. of the value of articles shipped, to be paid by the receiver of the goods.

6th. Terms of payment are as follows: Usually three months' credit is given from date of purchase and delivery of goods. Upon cash payment a discount of 2 per cent. is given.

7th. Bremen being one of the free ports of Germany, there is no duty upon goods arriving and consumed or used in Bremen territory. Goods, however, shipped from here to any other part of Germany are required to pay a duty in accordance to weight, which is 24 marks ($5.71) for each 100 kilograms. This rate is for the ordinary grades of glasswares. If the same is decorated or gilded, the rate of duty is 30 marks ($7.14) per 100 kilograms.

8th. No discrimination or difference is made on goods of this class manufactured in the United States.

In the finer qualities of glassware, such as crystal and cut glass, and, in reality, all blown ware, this market is well supplied, and from the best information I can obtain, articles of this quality manufactured in Germany, France, Bohemia, and England are far superior to that made in the United States, and also cheaper. The pressed glassware, however, manufactured in the United States has a good reputation, and commands a better price than wares of the same grade made here or elsewhere in Europe. The preference among dealers is given to the American goods, from the fact that they find them more durable, not so easily broken, of better quality, clearer glass, free from streaks, blisters, or other imperfection, and of better execution and workmanship. As to the best means of increasing the trade in this class of goods, I would suggest that the first requisite is to send goods of none but the best quality, and such as are adapted to this market. It will not do to take it for granted that because a certain style of dish, glass bowl, plate, &c., meets the wishes and wants of our people at home that it will be equally desirable here. Many of our manufacturers have made and still are making a great mistake in this respect in sending goods and wares not suitable or salable in this country. In order to secure a ready sale for any class of goods here it is necessary that the goods be such as please the fancy and tastes of the persons who purchase, and especially is this the case with glasswares. The tastes, notions, and views of the people should be consulted as to the shape, form, size, &c., of the articles made. No better way of doing this, I think, can readily be found than by obtaining samples of articles of glassware, such as are in use here, and such as the people are in the habit of seeing. From these samples or patterns our manufacturers could then manufacture articles that will find a ready sale.

Any of our goods or wares to be successfully introduced into this country requires time and patience, and above all a thorough and correct knowledge of the wants, necessities, notions, views, and often the prejudices of the people whose custom it is desired to obtain. Transmitted herewith I send price-currents and cuts of various kinds of glass-

ware manufactured by some of the larger manufactories in Germany. From the cuts given in these the general style, form, &c., of glassware in use, and such as is desired, can be seen. From the prices therein given a discount of from 25 to 30 per cent. is made. Making these deductions, the price of any article can be readily obtained, or rather the price at the manufactory.

The actual cost of manufacture is from 30 to 35 per cent. less than the selling price.

JOHN M. WILSON,
Consul.

UNITED STATES CONSULATE,
Bremen, September 21, 1882.

GLASS MANUFACTURE IN BREMEN.

REPORT BY CONSUL WILSON.

In reply to your circular letter of June 1, submitting series of questions relating to the cost of manufacturing window glass, I have to say that in this consular district there are no manufactories of that class, and in consequence thereof I have been unable to obtain any definite or reliable information.

The only class of glassware manufactured in this district is bottles and demijohns. Transmitted herewith is a table, furnished me by the Messrs. Stoeves Brothers, proprietors of the principal factory, giving the general system of their works, cost of material, amount of coal consumed, material used per day, with wages of men, &c., for one furnace.

JOHN M. WILSON,
Consul.

UNITED STATES CONSULATE,
Bremen, September 25, 1882.

Table giving the general system of manufacturing bottles and demijohns of common brown and green glass, and expenses of one furnace.

Eight pots per furnace; pots for 1,200 pounds glass. Materials: Weight, 4¼ tons per week, 27 tons each furnace. Coals each melt, 5¼ tons.

WAGES.

	Per furnace.
For 22 blowers per month	$476 00
For 2 shearers per month	53 50
For 12 day laborers per month	130 90

Kind and cost of material.

Material used.	Kind.	Cost per ton at mines.	Cost per ton at factory.	Cost dried.	Quantity used per melt and per furnace.
Sand	White	$0 24	$1 60	$1 85	2¼ tons..
Lime stone	Yellow	60	1 85	1 60	1¾ tons..
Sulphate, 95 per cent		16 60	18 00	18 00	450 pounds
Old glass	Broken	.....	5 20	.....	¼ ton....
Coal		1 60	2 45	.....	5¼ tons..

DRESDEN FLINT AND LIME GLASS.

REPORT BY CONSUL MASON.

I have the honor to reply to circular issued from the Department of State July 31, 1882.

There are but two manufactories of flint and lime glass in my consular district—one the Dresdner Glassfabrik, Frederick Siemens, situated in Dresden; the other Berthold & Hirsch, Glasshuttenwerk, at Radeberg, near Dresden. I immediately applied to the Dresdner Glassfabrik for the information desired by the Department, in a very polite letter, requesting such information, not incompatible with their interest, and offering in reciprocation any services I was able to return them at any time. I received in reply to my letter the following:

DRESDEN, *August* 31, 1882.

SIR: With every desire to be personally obliging to you, I regret to be unwilling to furnish the desired information, and to return the questions unanswered, because they are intended to benefit a country which prohibits by an onerous tariff the goods of the rest of the world, and also because the information would operate to the detriment of the trade of my own country.

Very respectfully,

FREDERICK SIEMENS.

JOSEPH T. MASON, Esq.,
United States Consul, Dresden.

Somewhat discouraged, I applied by a similar letter to Berthold & Hirsch, at Radeberg, and a few days since received in reply the following answers to the questions propounded:

RADEBERG, *September* 14, 1882.

CONSULATE OF THE UNITED STATES OF AMERICA, *Dresden:*

Inclosed we have the honor to return you the circular received with your esteemed letter of 2d September, and answer to the containing questions as follows:

1. In Saxony and Silesia.
2. Lamp chimneys, lamp shades; also globes for gas, smooth, blown, and pressed.
3. Chimneys and shades are the principal export articles, and cost, chimneys, ca., 40 pfennigs; shades, 1.50 marks per dozen.
4. For chimneys, ca., 10 per cent.; for shades, ca., 15 per cent.
5. The freight from Dresden to Hamburg cost on waterway, ca., 6 per cent; by direct railway, ca., 12 per cent.
6. Cash on arrival in Hamburg with 2 per cent. discount, or net against three months' draft.
7. Duties of export for these articles do not exist, and the duty of import in America is, on chimneys, 40 per cent.; on shades, 45 per cent. of the amount of the invoice.
8. This question we cannot precisely understand, and request you to translate the same correctly. As we presume it refers to laws of manufactures which exist here, we will answer you after receiving your reply.

Very respectfully,

BERTHOLD & HIRSCH.

Answer to the eighth question.—There are no laws or regulations discriminating against the manufactures of the United States of America. I hope yet to be able to report the cost of the manufacture of wine and beer bottles at the Dresdner Glassfabrik, which is their principal business. The other articles enumerated in circular are all manufactured over the border, in Bohemia.

There is a growing demand for American liter and half-liter beer glasses, because of their lightness and cheapness and the pattern of

handle, and, as I have stated in former dispatches, the best and I think the only way to introduce our manufactures, and thereby increase our trade with this country, is for our manufacturers to club together, establish a depot to represent their wares, superintended by an energetic, pushing, polite agent. I have *never* doubted that many of our "novelties and Yankee notions" could be introduced with profit to us and benefit to the consumers here. The Department must realize the difficulty attending the collection of reliable information, as desired in the circular. I am sure the manufacturers here regard us with jealousy, and often hatred. They are to a man for free trade in the United States, and fear any change looking otherwise.

And while the German Empire is looking to and adopting yearly a protective system, they fear injury to their business and trade, and ascribe all their ailments to America, that has forced this change upon the empire for its self-protection and preservation.

JOS. T. MASON,
Consul.

UNITED STATES CONSULATE,
Dresden, September 18, 1882.

GLASS MANUFACTURE IN GREAT BRITAIN.

REPORT BY CONSUL-GENERAL MERRITT, OF LONDON.

In reply to circular dated June 19, 1882, asking information regarding the manufacture of glass in the United Kingdom, with statistics of quantity, quality, and average cost of production, I would say that I have had the subject thoroughly investigated, and cannot give the answers desired, owing to the fact that every manufactory, whether of plate, colored, or common glass, has a process of its own, and all are exceedingly jealous of those who compete with them; so there are no statistics published.

The largest manufactory of fine plate glass is in Birmingham, and Mr. Wilson King, our consul there, has reported to the Department all the information that he could gain there.

The commoner glass manufactories are located in Yorkshire, but I have no data of the process or production.

In London only common glass is manufactured, and that in small amount. There are many large warehouses here, but their goods are chiefly imported from Belgium and France.

E. A. MERRITT,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
London, August 17, 1882.

WINDOW-GLASS MANUFACTURE IN BIRMINGHAM.

REPORT BY CONSUL KING.

Upon receipt of circular of June 1, relative to the manufacture of window glass, I applied at once to Mr. R. L. Chance, the head of one of the largest glass making establishments in England, and, so far as I know, the only maker of window glass in this consular district.

Mr. Chance has written me a prompt reply, declining to give me the statistical information required. He says that he doubts if any English manufacturers will take the trouble to fill up those statistics, or permit them to be made up from any information which they can give, because "English window glass is to a great extent shut out from the United States markets by prohibitory duties, and the manufacturers naturally, therefore, feel under no obligation to the United States Government." He also says:

> The manufacture of window glass in this country is moreover conducted under very different conditions to those which rule in the United States that the statistics, if furnished, would be of no practical utility, while their preparation would involve an immense amount of trouble.

Mr. Chance then goes on to say that the information required can be procured, if any place, in Belgium, the headquarters of window-glass manufacture in the world, and the seat of the chief exporters of that article to the United States.

As I have said, Mr. Chance and his partners are the only window-glass makers of whom I know here, and I find that none of the gentlemen to whom I have hitherto been indebted for statistics or information can aid me in this matter, and I fear I must say that I am not able to answer any of the questions asked.

I have found some printed matter in a pamphlet printed by one of the Chance family, but it is almost fifteen years old, and not, therefore, I fear, of any use. At that time the production of plate glass in the United Kingdom was 140,000 feet, and that of sheet glass about 23,000 tons annually.

Mr. R. L. Chance was the first to begin the manufacture of this sheet glass in England, which he did in 1832. At that time it was necessary to employ foreign workmen, but now nearly all those employed are English.

At first 36 inches long by 20 wide was regarded as a large size, but in 1865 the usual sizes were from 45 to 50 inches long, and 32 to 36 inches wide, and cylinders were sometimes blown as long as 77 inches. At that time there were but seven sheet-glass factories in England, and 75 per cent. of the product was made by three large firms. Concerning those three firms the following statistics were then given:

Wages paid annually	£	120,000
Coal used annually	tons.	165,000
Sand used annually	do..	10,000
Alkali used annually	do..	4,500
Chalk or limestone used annually	do..	3,500
Glass produced annually	do..	17,000
Workmen employed		2,500

The sand used is chiefly brought from Belgium and France.

The factories of the Messrs. Chance are regarded as models of what factories should be, and the physical comfort and moral and intellectual well-being of the workpeople and their families are amply provided for by many ingenious arrangements, by day schools for the children and night schools and lectures and concerts for the adults, and by insurance and burial clubs, reading and dining rooms, and a constant evidence that the employers regard the condition of the employed as of vast importance outside the working hours as well as within the factory walls.

I regret my failure to procure answers to your questions, and shall

still endeavor to do so to some extent, although I do not feel sanguine as to the result.

WILSON KING,
Consul.

UNITED STATES CONSULATE,
Birmingham, June 22, 1882.

WINDOW-GLASS MANUFACTURE IN LIVERPOOL.

REPORT BY CONSUL PACKARD.

I have the honor to inclose herewith statement of replies to a series of questions relating to the cost of manufacturing window glass, and which is in reply to your circular of the 1st ultimo. I may state that I have had considerable trouble in obtaining the brief information supplied, which was furnished me by an eminent firm of glass manufacturers here. There are some four or five manufacturers in this district, and they all firmly decline to give any information whatever, the above excepted.

STEPHEN B. PACKARD,
Consul.

UNITED STATES CONSULATE,
Liverpool, July 26, 1882.

PRICE OF LABOR PAID BY WINDOW-GLASS MANUFACTURERS.

Blowers' wages: Single-thick or 16-ounce, per 100 feet, 35*s.* to 60*s.* per week; double thick or 24-ounce, tenders or blowers, 16*s.* per week.

Assistants.—Flatteners, 4*s.* per 100 feet; shover assistant, 16*s.* per week; laying-out assistant, 30*s.* per week; taking-off assistant, 30*s.* per week; cutters, 25*s.* to 42*s.* per week.

Master shearer, to run furnace per month or per melt, 30*s.* per week; assistant shearer, 15*s.* per week; engineers, £2 per week; day laborers, £1 per week; blacksmiths, £1 5*s.* per week.

COST OF MATERIAL USED BY WINDOW-GLASS MANUFACTURERS.

Sand, common, 7*s.* 6*d.* per ton; lime or limestone, very little used; sulphate or carbonate of soda, £6 per ton; cullet or old glass, 40*s.* per ton.

Fuel.—Coal for furnace and flattening, 4*s.* 6*d.* per ton; wood for furnace and flattening, coke for furnace and flattening, not used.

GENERAL SYSTEM OF WORKING BY WINDOW-GLASS MANUFACTURERS IN ———.

Number of pots per furnace, 6; size of pots, 52 to 60 inches.

Average weight materials melted, 2,000 pounds per day.

Coal used each melt and blowing, 2 tons per pot; wood, not used; coal used per week for flattening for one furnace, 5 cwts. per pot; coke, not used.

Daily product of glass ready to work, 1,500 feet per pot.

Number of blowings per month, 16, or 4 per week; usual size of rollers, 44 inches wide; in diameter, 18 to 24 inches.

FLINT AND LIME GLASS MANUFACTURERS IN ENGLAND.

REPORT BY CONSUL PACKARD, OF LIVERPOOL.

I have the honor to inclose herewith statement of replies to a series of questions relating to flint and lime glass manufacturers from Messrs. Davenports (limited) and Messrs. T. F. Bennett & Co., both of this city, and which are in reply to your circular of the 31st July last.

I may state that the above firms are large glassware manufacturers, and the brief information they have given can be relied upon. Regarding the best means of increasing the trade of the United States in these articles with this port, I would recommend manufacturers to appoint an agency here, in which case their manufactures would be fully brought before the market, thus giving the public the opportunity of judging of their quality.

Owing to the great difficulty in obtaining information, I have not been enabled to make an earlier reply.

STEPHEN B. PACKARD,
Consul.

UNITED STATES CONSULATE,
Liverpool, September 25, 1882.

Messrs. Bennett & Co. to Consul Packard.

LIVERPOOL, *September* 21, 1882.

DEAR SIR: In reply to yours of 30th August, we beg to inclose copy of the queries submitted to us about glassware, and our replies to same, as far as we can give them. It would have been sent to you earlier, but we waited for a personal interview with a very respectable manufacturer for information on one point.

We presume the inquiries relate to goods made in Britain. Glass is still sent from the continent to Liverpool for transshipment to the United States, about which no general replies can be given; it is made at such various places and at such varying distances from the sea-board. With the extension of direct communication from the various shipping ports to the various parts of the United States this transshipment business is, of course, becoming smaller.

We remain, dear sir, yours truly,

THOS. F. BENNETT & CO.

S. B. PACKARD, Esq.,
Consul, U. S. A.

Series of questions relating to the manufacture of flint and lime glassware.

1st. Where is the glassware manufactured that is received at Liverpool?—Answer. Lancashire, Warwickshire, Staffordshire, Northumberland, Glasgow, Edinburgh.

2d. What articles of glassware are used, and are they pressed or blown?—A. All articles are used, and they are both pressed and blown.

3d. What is the average cost of each article at the point of manufacture?—A. The articles are so diverse that it is impossible to answer the question.

4th. What is the cost of packages and sizes of same?—A. They are various sized packages; average cost, say 5*s*. Many manufacturers do not charge for packages, but include them in their price of glass.

5th. What is rate of freight and insurance?—A. By freight, we presume you mean inland carriage, which varies from 5*s*. to 25*s*. per ton weight. Ocean freight to New York, say 15*s*. per 40 cubic feet; insurance, one-half per cent.

6th. What are the terms of payment?—A. Usually cash in a month.

7th. Are there any duties, and what are the custom-house and landing expenses?—A. There are no duties here.

8th. Are there any laws or regulations discriminating against articles manufactured in the United States, as compared with any other country?—A. No.

The above inquiries relate to the manufactures of pressed glassware, and include the following articles, viz: Lamp-chimneys, bowls, dishes, mugs, castor-bottles, bar-bottles, bread-plates, cream-jugs, celeries, globes, shades and founts, goblets, tumblers and glasses, pickle jars, round and oval dishes, sugar-bowls, inkstands, molasses and sirup-jugs, pitchers, spoon-holders, salts, champagnes, clarets, wines, and many varieties of stoneware.*

Most of the above articles are made in so many qualities and of so many shapes and patterns that it would be utterly impossible to convey any general idea of prices.

Messrs. Davenport to Consul Packard.

Series of questions relating to the manufacture of flint and lime glassware.

1st. Where is the glassware manufactured that is received at Liverpool?—Answer. Various places in England and Germany.

2d. What articles of glassware are used, and are they pressed or blown?—A. All kinds, cut and pressed.

3d. What is the average cost of each article at the point of manufacture?—A. Cannot answer this.

4th. What is the cost of packages and sizes of same?—A. Cannot answer this.

5th. What is the rate of freight and insurance?—A. Cannot answer this.

6th. What are terms of payment?—A. Various.

7th. Are there any duties, and what are the custom-house and landing expenses?—A. No duties; two-thirds per ton.

8th. Are there any laws or regulations discriminating against articles manufactured in the United States, as compared with any other country?—A. No.

The above inquiries relate to the manufactures of pressed glassware, and include the following articles, viz: Lamp-chimneys, bowls, dishes, mugs, castor-bottles, bar-bottles, bread-plates, cream-jugs, celeries, globes, shades and founts, goblets, tumblers and glasses, pickle-jars, round and oval dishes, sugar-bowls, inkstands, molasses and sirup jugs, pitchers, spoon-holders, salts, champagnes, clarets, wines, and many varieties of stoneware.*

From Davenport's, Limited, Liverpool.

GLASS MANUFACTURE IN NEWCASTLE-UPON-TYNE.

REPORT BY CONSUL JONES.

The northeastern district of England has occupied an important position in glass manufacturing from the earliest history of the industry in this country. As far back as the year 676 "makers of glass" were brought from Gaul to the banks of the Wear, to manufacture glass and decorate the monasteries at Monk-wearmouth, and we are informed by Bede that they "not only finished the work required, but taught the English nation their handicraft, which was well adapted for inclosing the lanterns of the church, and for vessels required for various uses." We have the authority of the venerable author for saying that at that time glassmakers were "unknown in Britain."

The first manufactory of crown glass in the United Kingdom was established at Newcastle-on-Tyne by Sir Robert Mannsell in the year 1616.

By the records of the town council for the year 1737, we find that four bottle-works were in operation within the borough at that period. Early in the seventeenth century, before the process of rolling sheet

* Stemware.

glass was adopted in Lancashire, blown plate glass was largely made in South Shields, at the mouth of the Tyne. And a remarkable instance of the tenacity with which a long established trade clings to life is found in the fact that plate glass made on the blowing method was manufactured at South Shields by descendants of the founder of the trade in the district until 1845; then, however, it was entirely superseded by the cast plate.

The northeastern district still holds its pristine reputation and importance in the glass trade. Nearly every variety of glassware, from a beer bottle to the most exquisite ornaments of Venetian hue and design, are here made for the home and foreign markets. Upwards of 5,000 men are employed in the various branches of the trade on the Tyne alone.

South Shields continues to be an important center in the manufacture of plate glass. Sunderland contains large works for making bottles and pressed ware; and there also Messrs. Hartley turn out large quantities of rolled plate and stained glass in all the somber tints of antiquity.

Newcastle, Gateshead, and adjacent towns manufacture glass in all branches of the trade. Stained and painted glass are produced here in a style which has secured orders for the cathedrals, churches, and castles of the United Kingdom as well as from other countries.

Crystal ware has attained great perfection, while common bottles, globes, and chimneys are made in fabulous numbers on the Tyne.

In answer to the questions submitted by the Department, I would say: 1st and 2d. A large proportion of the glassware consumed in this district is manufactured on the Tyne.

The home product include stained and painted glass used in decorating churches, residences, hotels, restaurants, and public buildings; crystal table ware, pressed (and partly blown in some cases), in great variety, including biscuit-boxes, butter-dishes, candle-sticks, celery and cheese stands, custards and jellies, decanters, dessert services, finger-bowls, flower-pots, goblets, ice pails and plates, inks, tobacco-jars, liquor-bottles, measures, milk-jugs, paper-weights, pickle-jars, plates and bowls, salad-dishes, salts, salvers, tumblers, vases, "vitrified porcelain," imitations of opal, turquoise, &c., blown and pressed table ornaments in various designs and shades of color; plate glass, sheet and crown glass used for windows and horticulture, common bottles used by wholesale dealers for bottling wines (excluding sparkling wines), spirits, ale, and stout; lamp chimneys, globes, and gas moons, &c.

Whilst the special wares of this district are largely shipped to other commercial centers in this country as well as "over sea," large quantities of goods are imported here from the glass manufactories of this kingdom and other countries. Manchester sends sheet-glass obscured, fluted, and enameled, and cut-glass ware.

Birmingham supplies plate and crown glass, lamps, shades, globes, and chimneys for lamps and gas—but gas chimneys are being superseded by chimneyless burners—cut-glass bottles for cruets, spirit frames and wine decanters, pressed ware and ornaments.

Glasgow and Edinburgh send many articles similar to the goods just enumerated as coming from Birmingham.

Stourbridge is a large contributor in pressed goods and table ornaments and cut glass. Large quantities of glassware are imported to this district both direct and through the large dealers of London and other cities. The number of cases of glassware brought to the Tyne

"coastwise" and "over sea" during 1880 and 1881 can be ascertained by the following table:

From—	1880.	1881.	Increase.	Decrease.
	Cases.	*Cases.*	*Cases.*	*Cases.*
Coastwise	803	90		713
Germany	519	685	166	
Netherlands	7,735	8,196	461	
Norway and Sweden	1	20	19	
United States		29	29	

But the greater proportion of foreign glassware intended for this market finds its way here through the larger dealers of London and other cities.

Of the foreign ware consumed here, Germany sends a great variety of goods, including pressed ware, chimneys, globes, cylinder funnels for gas burners, blown clear bottles, &c., at much lower prices than those at which British goods are sold.

Bohemia contributes much of the well-known colored ware of that country, in vases, wines, decanters, and in a variety of fancy goods. Sheet and plate glass are sent here from Belgium.

French goods in fine cut ware and fancy goods are largely sole here.

The province of Lorraine supplies the bulk of watch-glasses.

Globes and shades are imported from Saint Louis, and are reported as "the best in the market" by a competent authority. But for pressed glass I conclude that the manufacturers of this district occupy a position in the trade equal in most respects, and superior in special goods, to any in Europe, and a well-informed manufacturer admitted to me that they are most hardly pressed in certain articles by the American competition. Inasmuch as these inquiries are made by the Department "in the interest of our manufacturers of pressed glassware," I here introduce an illustrated catalogue* covering nearly every branch of that trade, with a price list subjoined.

PRICE LIST, AUGUST, 1881.

ALES.

	Price per dozen. s.	d.
Imperial ½-pint	4	9
Imperial ½-quart	4	2
Imperial ¼-quart	6	0
Imperial ½-pint	4	9
Imperial ½-quart	4	2
Imperial ¼-quart	6	0
Imperial ½-pint	4	6
Imperial ½-quart	4	2
Imperial ¼-quart	6	0
Imperial ¼-quart	6	0
Imperial ½-pint	4	9
Imperial ½-pint	4	9
Imperial ½-quart	3	6
Imperial ½-pint, fluted	4	2
Imperial ½-pint	5	0
Imperial ½-quart	4	6
Imperial ½-pint	4	0
Imperial ½-pint	4	0
Imperial ½-pint "Elgin"	4	0
Imperial ½-quart "Elgin"	3	9
Imperial bare ½-pint	4	3
Imperial ½-pint	4	3

ALES—continued.

	Price per doz. s.	d.
Imperial ½-quart	4	6
Imperial ½-pint	4	0
Imperial ½-quart	3	9
Imperial ½-quart	4	6

BASKETS.

	Best colors. s.	d.	s.	d.
With glass side-handles	5	6	4	0
5-inch	4	0	3	0
6-inch	5	0	3	6
7-inch	6	0	4	6
	7	0	5	3
4-inch	1	4	1	0
5-inch	2	9	2	0
	6	0	4	6
	6	0	4	6
7-inch	5	4	4	0
6½-inch	5	4	4	0
Upright, 2 handles	2	0	1	6
Upright, large	4	0	3	0

* It was not considered expedient to publish the illustrations sent by Consul Jones.

BASKETS—continued.

	Best colors. s.	d.	s.	d.
Upright, cover for ditto	1	9	1	4
Tall spill	3	4	2	6
6½-inch	4	4	3	3
Open work	4	4	3	3
Carpenter, closed shape	2	8	2	0
Carpenter, open shape	2	8	2	0
Flat shape	2	8	2	0
.....	4	4	3	3
.....	4	8	3	6
.....	2	8	2	0
.....	3	4	2	6
.....	2	8	2	0
.....	5	0	3	9

BISCUIT BOXES.

	Best colors. s.	d.	s.	d.
2 pieces	12	0	9	0
3 pieces, body	15	0		
3 pieces, cover	3	6	26	6
3 pieces, plate	8	0		
3 pieces, body, obscured	17	0		
3 pieces, cover, obscured	4	0	31	6
3 pieces, plate, obscured	10	6		
2 pieces, body	16	0		
2 pieces, cover	6	0	22	0
3 pieces, body	8	6		
3 pieces, cover	2	0	13	6
3 pieces, plate, 8 in.	3	0		
2 pieces, body	12	6		
2 pieces, cover	2	0	14	6
2 pieces, body	14	0		
2 pieces, cover	2	0	16	0
2 pieces, body	16	0		
2 pieces, cover	2	6	18	6

BOWLS.

(See dishes, round.)

BUTTERS.

	s.	d.
2 pieces	13	6
3 pieces	12	0
3 pieces	12	6
3 pieces	12	6
3 pieces	12	6
3 pieces	11	0
3 pieces	8	0
3 pieces	8	6
3 pieces, large	15	0
3 pieces, small	12	0
3 pieces	12	0
3 pieces, large	10	0
2 pieces, small	7	0
3 pieces, for honey	5	6
3 pieces, larger	8	0
3 pieces	12	0
3 pieces	16	0
3 pieces	24	0
3 pieces	36	0
2 pieces	8	0
2 pieces, obscured	9	6
2 pieces	8	6
2 pieces, obscured	10	0
2 pieces	7	0
Lining, for wood and parian, best colors, 4s.	3	3
Lining, for wood and parian, obscured	4	0
Lining, for wood and parian, obscured, best colors	4	9
2 pieces, large, obscured	10	6
2 pieces, small	7	6
2 pieces	7	0
2 pieces, large	10	0
2 pieces, large, obscured	12	0
2 pieces, small	6	0
2 pieces, small, obscured	8	0
3 pieces oval and round	10	6
3 pieces, oval and round, obscured	14	0
2 pieces, large, obscured	10	6
2 pieces, small, obscured	7	6
2 pieces, large, obscured	13	0
2 pieces, small, obscured	9	0
2 pieces, large	10	0

BUTTERS—continued.

	s.	d.
2 pieces, small	6	6
2 pieces, oval	6	6
2 pieces, round	5	6
2 pieces, oval	7	0
2 pieces, obscured	15	0
2 pieces, obscured, edge only	11	6
2 pieces, round	7	6
2 pieces, round, obscured	14	0
2 pieces, round, obscured, edge only	10	6
3 pieces	10	0
2 pieces	6	6
2 pieces	7	0
2 pieces, obscured	10	6
2 pieces	9	6
2 pieces, obscured	12	0
3 pieces	7	0
2 pieces, obscured	10	6
2 pieces	8	3
2 pieces, obscured	9	6
2 pieces	12	0
2 pieces	7	0
2 pieces, large	6	6
3 pieces, small, to match	5	6
3 pieces, obscured	17	0
2 pieces	7	6
2 pieces, round	5	0
2 pieces, oval, to match	6	0
2 pieces	8	0
2 pieces	6	0
2 pieces	7	6
2 pieces	5	6
2 pieces	5	6
2 pieces	6	0
2 pieces	5	0
2 pieces, obscured	8	0
2 pieces	7	6
2 pieces	6	6
2 pieces	7	6
2 pieces, side handles	5	3
2 pieces	6	6
2 pieces	6	4
2 pieces	6	0
2 pieces	6	4
2 pieces	5	6
2 pieces	3	6
2 pieces	3	6
2 pieces	6	0
2 pieces	7	6
2 pieces	6	3
2 pieces	6	0
2 pieces	4	6
2 pieces	4	0
2 pieces	3	6
2 pieces	3	0
2 pieces	4	6
2 pieces	4	6
2 pieces	4	6
2 pieces	6	6
2 pieces	4	9
2 pieces	5	3
2 pieces	6	0
2 pieces	4	6
2 pieces	8	6
2 pieces	6	0
2 pieces	6	6
2 pieces	6	0
2 pieces	4	6
2 pieces	7	0
2 pieces	6	0
2 pieces	6	0
2 pieces	5	6
2 pieces	4	4
2 pieces	4	9
2 pieces	4	4
2 pieces	6	0
2 pieces	6	4
2 pieces	5	0
2 pieces	3	6

BUTTER MIDDLES, ETC.

Butter middle, round	3	0
Marmalade body, ½-pint	3	10
Marmalade body, ½-pint, cypher	3	9
Marmalade body, ½-pint, smaller	3	4
Butter middle, round, and oval	4	0

BUTTER MIDDLES, ETC.—continued.

	s.	d.
Butter middle, round, and oval, obscured	5	6
Butter middle, round, for cutting	5	6
Butter middle, oval, for cutting	5	6
Butter middle, round, and oval, obscured, and cut	9	6
Butter middle, round, and oval, obscured	7	6
Marmalade body	3	3
Marmalade body, obscured	3	9
Biscuit body	15	0
Biscuit body, obscured	17	0
Butter middle	4	3
Butter middle	3	3
Marmalade body	2	6
Biscuit body	3	6
Biscuit body, rough for mounting	9	0
Butter body	3	0
Marmalade body	5	0
Butter body	3	6
Butter body	4	0
Butter body	4	2
Butter body	5	0
Butter body, obscured	6	0
Butter body	2	7

CANDLESTICKS.

	Best colors. s.	d.	s.	d.
8-inch	10	8	8	0
9-inch	16	0	12	0
10-inch	24	0	18	0
Chamber	5	0	3	6
Chamber	5	0	3	6
Chamber	7	0	5	0
8-inch	6	0	4	6
9 inch	9	0	7	6
10-inch	14	0	10	6
8-inch	8	0	6	0
9-inch	12	0	9	0
10-inch	16	0	12	0
5-inch	5	0	3	9
5-inch, obscured	6	0	4	6
6-inch	5	6	4	3
6-inch, obscured	6	8	5	0
Chamber	7	0	5	6
8 inch	10	0	7	6
7-inch	10	8	8	0
7½-inch	9	4	7	0
Matches toilet set	4	0	3	0
8-inch	10	8	8	0
8 inch	9	4	7	0
8-inch	10	8	8	0
Chamber	4	8	3	6
Chamber	12	8	9	6
Chamber	10	8	8	0
Chamber	5	4	4	0
8-inch	10	8	8	0
Chamber	4	0	3	0
7-inch	4	0	3	0

CANDLE ORNAMENTS.

	Best colors. s.	d.	s.	d.
	2	0	1	6
	2	0	1	6
	2	0	1	6

CANS.

	s.	d.
½-pint	3	6
½-pint to match	1	6
¼-pint	4	0
Pint	8	0
½-pint to match	4	0
½-quart	3	0
½-pint	2	4
¼ pint	4	0
Matches sugar, &c	2	9
Cover	1	6
Small	1	6
Sedlel size	6	6
Cover	1	6
	1	6
Pint	6	0
Cover	2	0

CANS—continued.

	s.	d.
½-pint	3	6
Cover	1	3
½-quart	2	9
½-pint	2	3
Pint	6	6
½-pint	3	6
½-quart	2	9
½-pint	2	3
Small	2	0
Pint seidel	5	0
Pint seidel	4	6
Bare pint hollows	5	0
Bare pint hollows	1	6
½-pint hollows	3	10
Matches tumbler	3	6
Matches tumbler	0	10
Matches tumbler	3	6

CARAFES AND TUMBLE-UPS.

Quart	7	6	10	0
Up	2	6		
Pint	5	0	7	6
Up	2	6		
Pint	5	0	7	3
Up	2	3		
Quart	7	6	9	0
Up	1	6		
Pint	5	0	6	6
Up	1	6		
Quart			12	6
Pint			7	6
½-pint			6	0
Quart, cut neck			16	6
Pint, cut neck			10	6
½-pint, cut neck			9	6
3-pint	24	0	27	0
Up	3	0		
Quart	15	6	18	6
Up	3	0		
Pint	10	0	13	0
Up	3	0		
3-pint, cut neck	36	0	39	0
Up, cut neck	3	0		
Quart, cut neck	30	0	33	0
Up, cut neck	3	0		
Pint, cut neck	15	0	18	0
Up, cut neck	3	0		
1½-pint	9	0	12	0
Up	3	0		
Quart			12	0
Pint			8	0
½-pint			6	0
Quart, cut neck			22	6
Pint, cut neck			15	6
½-pint, cut neck			10	6
Quart	13	6	17	0
Up	3	6		
Pint	10	0	13	0
Up	3	0		
Quart, cut neck	18	0	21	6
Up	3	6		
Pint, cut neck	12	0	15	0
Up	3	0		
Pint	9	0	12	0
Up	3	0		
3-pint	18	0	20	6
Up	2	6		
Quart	12	0	14	6
Up	2	6		
1½-pint	9	0	11	0
Up	2	0		
Pint	7	0	9	0
Up	2	0		
Quart, tall shape	12	0	14	6
Up	2	6		
1½-pint, tall shape	9	0	11	0
Up	2	0		
Pint, tall shape	7	0	9	0
Up	2	0		
Quart, obscured	13	6	16	6
Up	3	0		
1½-pint, obscured	9	6	12	0
Up	2	6		
Pint, obscured	7	6	10	0
Up	2	6		

CARAFES AND TUMBLE-UPS—continued.

			s.	d.
Quart, engraved	18	6	23	0
Up	4	6		
1½-pint, engraved	14	0	18	0
Up	4	0		
Pint, engraved	11	0	15	0
Up	4	0		
Quart	15	0	18	0
Up	3	0		
Pint	10	6	13	0
Up	2	6		
Pint, blown pillar	3	6	5	3
Up	1	9		
Quart	12	6	15	6
Up	3	0		
Pint	7	6	10	0
Up	2	6		
Quart, obscured	16	0	20	0
Up	4	0		
Pint, obscured	10	0	13	0
Up	3	0		
Stand for carafe 896			4	6
Stand for carafe 896, obscured			5	6
Quart, taper	16	0	18	5
Tumbler to fit	2	5		
Pint	12	0	13	11
Tumbler to fit	1	11		
Quart	10	0	13	0
Up	3	0		
Pint	6	3	8	6
Up	2	3		
Pint	6	3	8	0
Up	1	9		
Pint, melon-shape	6	3	8	0
Up	1	9		
Quart	3	9	5	3
Up	1	6		
Pint	2	9	4	2
Up	1	5		
Pint, obscured	6	6	8	0
Up	1	6		
Pint, cut neck	8	6	11	0
Up	2	6		
Pint, obscured, cut neck	9	0	12	0
Up	3	0		
Quart	12	6	15	0
Up	2	6		
Pint	8	0	10	0
Up	2	0		
Quart, obscured	14	6	18	0
Up	3	6		
Pint, obscured	9	6	12	6
Up	3	0		
Quart, plain, cut neck	18	0	20	6
Up	2	6		
Pint, plain, cut neck	12	0	14	0
Up	2	0		
Quart, obscured, cut neck	20	6	24	0
Up	3	6		
Pint, obscured, cut neck	13	6	16	6
Up	3	0		
Quart, obscured, cut mirrors	17	0	21	6
Up	4	6		
Pint, obscured, cut mirrors	11	6	15	6
Up	4	0		
Quart, obscured, cut neck, cut mirrors	23	0	27	6
Up	4	6		
Pint, obscured, cut neck, cut mirrors	15	6	19	6
Up	4	0		
Pint	3	3	5	6
Up	2	3		
Quart	13	6	16	0
Up	2	6		
Pint	9	0	11	0
Up	2	0		
½-pint	6	6	8	0
Up	1	6		
Quart, obscured	16	6	20	0
Up	3	6		
Pint, obscured	12	0	15	0
Up	3	0		
½-pint, obscured	7	6	9	6
Up	2	0		
Quart, globe			15	0
Quart, cut neck			19	6
Quart, obscured			17	0

CARAFES AND TUMBLE-UPS—continued.

			s.	d.
Quart, obscured and cut neck			21	0
Pint, globe	9	0	11	
Up	2	3		
Pint, cut neck	12	6	14	
Up	2	3		
Pint, obscured	10	6	13	6
Up	3	0		
Pint, obscured and cut neck	14	0	17	
Up	3	0		
Pint	5	6	7	
Up	2	3		
Pint	6	9	9	
Up	2	3		
Pint, cut neck	13	0	15	
Up	2	3		
Pint, obscured	8	6	11	
Up	2	9		
Pint, obscured and cut neck	15	0	17	
Up	2	9		
Quart	13	9	16	
Up	2	3		
Quart, cut neck	20	0	22	
Up	2	3		
Quart, obscured	15	0	17	
Up	2	9		
Quart, obscured and cut neck	21	0	23	
Up	2	9		
Quart, globe	14	0	16	
Up	2	0		
Quart, cut neck	18	6	20	
Up	2	0		
Pint	11	0	13	
Up	2	0		
Pint, cut neck	15	0	17	
Up	2	0		

Tall, same price as 1084.

Pint	3	6		
Up	2	3		
Pint	6	7		
Up	1	1		
Pint, cut star bottom	8	7		
Up	1	1		
Pint, cut flute	9	6		
Up	2	6		
Carafe, engraved	7	10		
Up	1	10		
Pint	18	0		
Up	6	0		
Pint	3	0		
Up	2	0		
Pint	3	3		
Up	2	0		
Pint	17	0		
Up	5	0		
3-gill	19	0		
Up	5	0		
Pint, cut neck, two rows of hollows	27	0		
Up, fluted only	5	0		
6-pints, plain				
4-pints, plain				
3-pints, plain				
2-pints, plain				
4-pints, cut neck				
3-pints, cut neck				
2-pints, cut neck				
4-pints, plain				
3-pints, plain				
2-pints, plain				
4-pints, cut neck and star				
3-pints, cut neck and star				
3-pints, cut neck and star				
Plain	10	6		
Up	1	6		
Up-star bottom				
Pint pillar	3	6		
Up	1	0		

CARAFE STANDS.

Obscured				
Obscured				
Frosted, on feet				

CELERIES.

	s.	d.
	12	0
	13	0
To match dish 699	26	0
Small	7	6
Large	20	0
Small	12	0
Large	13	0
Small	8	0
Large, match service	18	0
	5	6
Large	21	0
Small	15	0
Matches dishes, &c	10	6
Matches dishes, &c	13	0
Matches dishes, &c	12	0
Obscured	15	0
Obscured cut mirrors	18	0
Obscured	14	0
Matches dishes, &c	12	0
Matches dishes, &c., obscured	15	0
Matches dishes, &c	13	0
Matches dishes, &c., obscured	15	0
Matches dishes, &c	11	9
Matches dishes, &c., plain	9	7
Matches dishes, &c., obscured	10	7
	12	6
	8	6
	7	9
	8	9
	7	6
	21	0
	26	0
	26	9
Large, turquoise top	22	0
Small, turquoise top	15	0

CHEESE STANDS.

	21	0
Obscured	27	0
Large	10	6
Small, to match	7	6
	6	0

CIGAR ASH DISHES.

	Best colors.	
	1 8	1 3
	1 0	0 9

COMPORTS.

5-inch	7	0
6-inch	10	6
7-inch	16	0
4-inch	21	0
9-inch	27	0
10-inch	33	0
12-inch	54	0
5-inch cover	4	6
6-inch cover	6	0
7-inch cover	10	0
6½-inch comport	6	0
8-inch comport	10	0
8-inch cover	4	0
6-inch comport, obscured	6	0
7½-inch comport, obscured	9	6
9-inch comport, obscured	15	0
7-inch comport, obscured	7	6
8½-inch comport, obscured	10	6
6-inch comport	6	0
7½-inch comport	7	6
2-inch comport	12	0
6-inch comport, obscured	7	6
7½-inch comport, obscured	9	6
9-inch comport, obscured	15	0
5-inch comport	3	9
6-inch comport	6	6
7-inch comport	9	6
4-inch comport	14	0
5-inch comport, obscured	5	0
6-inch comport, obscured	8	0
7-inch comport, obscured	12	0
4-inch comport, obscured	18	0
5½-inch comport	3	0
8-inch comport	9	0
comport	12	0

COMPORTS—continued.

	s.	d.
10-inch comport	18	6
9-inch comport and cover	31	0
5½-inch comport	3	6
8-inch comport	10	0
9-inch comport	16	0
10-inch comport	20	0
5½-inch comport	3	6
8-inch comport	10	0

CRUETS, &C.

Cruet, caster, and mustard			1	8
Cruet, caster, and mustard			1	8
Cruet, caster, and mustard			1	8
Cruet, caster, and mustard			4	0
Cruet, caster, and mustard, cut neck			4	8
Cruet, caster, and mustard			4	0
Cruet, caster, and mustard			2	0
Cruet	3	0		
Caster	3	0	2	8
Mustard, no handle	2	0		
Cruet, caster, and mustard			1	8
Cruet	2	0		
Caster	2	9	2	2
Mustard	2	9		
Cruet	4	6		
Caster	3	0	3	10
Mustard	4	0		
Cruet, cut neck	6	6		
Caster	4	0	4	10
Mustard	4	0		
Cruet	2	0		
Caster	1	9	2	1
Mustard	2	6		
Cruet, caster, and mustard			1	8

CUT CRUETS, &C.

Cruet	6	0		
Caster	4	6	5	6
Mustard	6	0		
Soy			5	6
Cruet	7	0		
Caster	5	6	6	6
Mustard	7	0		
Soy			6	6
Cruet	11	6		
Caster	8	6	10	6
Mustard	11	6		
Soy			10	6
Cruet, &c			4	0
Cruet, &c			4	0
Cruet, &c			4	0
Cruet, &c			4	0
Cruet, &c			4	6

CUSTARDS AND JELLIES.

Custard	3	0
Jelly	3	0
Custard	2	0
Jelly	2	6
Custard	2	6
Jelly	2	0
Custard	1	0

DECANTERS.

	Price per dozen.		Price per set.	
	s.	d.	s.	d.
Quart, plain	15	0	4	0
Pint, plain	9	0		
½-pint	6	6		
Quart, cut neck	19	0	5	2
Pint, cut neck	12	8		
½-pint, cut neck	9	6		
¾-pint, plain	36	0		
Quart, plain	18	0	5	0
Pint, plain	12	0		
½ pint, plain	7	6		
¾-pint, cut neck	54	0		
Quart, cut neck	30	0	8	4
Pint, cut neck	20	0		
½-pint	10	0		
Quart, plain	16	0	4	5
Pint, plain	11	0		

DECANTERS—continued.

	Price per dozen. s.	d.	Price per set. s.	d.
½-pint	6	6		
Quart, cut neck	27	0	7	8
Pint, cut neck	19	0		
½-pint, cut neck	12	0		
Quart, plain	16	6	4	8
Pint, plain	11	6		
½-pint	7	6		
Quart, cut neck	27	0	7	8
Pint	19	0		
½-pint	12	0		
Quart, globe shape, plain	15	0	4	2
Pint	10	0		
Quart, cut neck	24	0	6	8
Pint, cut neck	16	0		
Quart, plain	16	6	4	8
Pint, plain	11	6		
½-pint	7	6		
Quart, cut neck	27	0	7	8
Pint, cut neck	19	0		
½-pint, cut neck	12	0		
Quart, plain	16	0	4	8
Pint, plain	11	6		
Quart, cut neck	27	0	7	8
Pint, cut neck	19	0		
3-pint, globe	24	0		
Quart, globe	16	0	4	6
Pint, globe	11	0		
Quart	20	0	5	6
Pint	13	0		
Quart	20	0	5	6
Pint	13	0		
Quart	18	0	5	0
Pint	12	0		
Quart	29	0	7	10
Pint	18	0		
Quart, without stopper	24	0	6	8
Pint, without stopper	16	0		
Quart	15	0	4	2
Pint	10	0		
Quart	17	0	4	10
Pint	12	0		
Quart	5	9	1	7½
Pint	4	0		
½-pint	3	6		
Quart	17	0	4	10
Pint	12	0		
Quart, obscured	19	0	5	5
Pint, obscured	13	6		
Quart, cut neck	25	0	7	0
Pint, cut neck	17	0		
Quart, obscured, cut neck	27	0	7	7
Pint, obscured, cut neck	18	0		
Quart, obscured, cut mirrors	22	6	6	4
Pint, obscured, cut mirrors	15	6		
Quart, obscured, cut neck, and mirrors	30	6	8	6
Pint, obscured, cut neck, and mirrors	20	6		
Quart, globe	18	0	5	0
Pint globe	12	0		
Quart, globe, obscured	20	0	5	7
Pint, globe, obscured	13	6		
Quart, globe, cut neck	26	0	7	2
Pint, globe, cut neck	17	0		
Quart, globe, cut neck, and obscured	28	0	7	9
Pint, globe cut neck, and obscured	18	6		
Quart, globe, cut mirrors, and obscured	28	6	6	6
Pint, globe, cut mirrors, and obscured	15	6		
Quart, globe, cut mirrors, obscured, cut neck	31	6	8	8
Pint, globe, cut mirrors, obscured, cut neck	20	6		
Quart	17	0	4	10
Pint	12	0		
½-pint	8	0		
Quart, R. M., obscured	20	0	5	8
Pint, R. M., obscured	14	0		
½-pint, R. M., obscured	9	6		
Quart, P. M	20	0	5	10
Pint, P. M	15	0		

DECANTERS—continued.

	Price per dozen. s.	d.	Price per set. s.	d.
½-pint, P. M	11	0		
Quart, P. M., obscured	28	0	6	8
Pint, P. M., obscured	17	0		
½-pint, P. M., obscured	12	6		
Quart, globe	19	6	5	6
Pint, globe	13	6		
Quart, obscured	28	0	6	4
Pint, obscured	15	0		
Quart, cut neck	27	0	7	6
Pint, cut neck	18	0		
Quart, cut neck and obscured	28	0	8	0
Pint, cut neck and obscured	20	0		
Tall, same price as 1082.				
Quart	16	0	4	6
Pint	11	0		
Quart	16	0	4	7
Pint	11	6		
Quart, cut neck	28	0	8	0
Pint, cut neck	20	0		
Quart	5	0	1	6
Pint	4	0		
Quart, tall	18	0	5	2
Pint, tall	13	0		
Quart, cut neck	26	0	7	5
Pint, cut neck	18	6		
Globe shape same price.				
3-pint	22	0		
Quart	13	0	3	0
Pint	9	0		
½-pint	6	6		

CUT DECANTERS.

Quart	60	0	16	8
Pint	40	0		
Quart	39	0	10	8
Pint	25	0		
Quart	44	0	12	4
Pint	30	0		
Quart	56	0	15	0
Pint	38	0		

DISHES.

Oval and round.

Flat, oval dishes are made to most of these services. Prices same as oval dishes.

4½ inch, oblong	2	0	
5½-inch, oblong	2	3	
5½-inch, oblong	2	0	
5½-inch, oblong	1	10	
7-inch, oblong	3	0	
9-inch, oblong	7	0	
11-inch, oblong	12	6	
5½-inch, oblong	2	0	
7-inch, oblong	4	0	
9-inch, oblong	8	0	
11-inch, oblong	16	0	
4-inch, round	1	0	
6-inch, round	2	0	
8-inch, round	6	0	
10-inch, round	12	0	
12-inch, round	20	0	
6-inch, oblong	3	0	
8-inch, oblong	7	0	
10-inch, oblong	14	0	
11-inch, oblong	18	0	
4½-inch, oval	1	6	
6-inch, oval	3	0	
7½-inch, oval	4	6	
8½-inch, oval	6	0	
9½-inch, oval	10	0	
10½-inch, oval	14	0	
5½-inch, round	2	0	
7½-inch, round	6	0	
9½-inch, round	12	0	
11½-inch, round	27	0	
6-inch, oblong	2	4	
8-inch, oblong	5	4	
9-inch, oblong	7	0	
10 inch, oblong	9	0	

DISHES—continued.

	Per dozen. s. d.
11-inch, oblong	11 6
6-inch, round	2 8
9-inch, round	5 8
10-inch, round	9 4
11-inch, round	12 0
6-inch, oblong	3 6
7-inch, oblong	5 0
8-inch, oblong	7 0
9-inch, oblong	10 6
10-inch, oblong	13 6
11-inch, oblong	18 0
5-inch, round	2 6
6-inch, round	3 6
7-inch, round	5 6
8-inch, round	8 6
9-inch, round	13 0
10-inch, round	16 0
12-inch, round	26 0

For bowls with legs, see comports.

6½-inch, oval	3 0
8-inch, oval	6 0
9½-inch, oval	9 0
11-inch, oval	15 0
6½-inch, round	4 6
8-inch, round	9 0
9½-inch, round	15 0
11-inch, round	24 0
6-inch, oblong	2 9
7½-inch, oblong	5 0
9-inch, oblong	9 0
10½-inch, oblong	16 0
12-inch, oblong	30 0
5-inch, round	3 0
6-inch, round	4 0
7½-inch, round	6 0
9-inch, round	10 0
10½-inch, round	20 0
12-inch, round	36 0
13-inch, round	54 0
6½-inch, oval	2 6
8-inch, oval	5 0
9½-inch, oval	7 6
11-inch, oval	12 0
6½ inch, round	3 0
8-inch, round	6 0
9½-inch, round	9 0
11-inch, round	15 0
6½-inch, oval	3 6
8-inch, oval	6 0
9½-inch, oval	10 0
11-inch, oval	15 0
5-inch, round	3 0
6½-inch, round	4 0
8-inch, round	8 0
9½-inch, round	15 0
11-inch, round	24 0
6-inch, oblong	2 3
6-inch, oblong	2 6
6½-inch, oval	2 3
8-inch, oval	4 0
9½-inch, oval	6 6
11-inch, oval	12 0
6½-inch, round	2 6
8-inch round	5 0
10½-inch, round	9 0
11½-inch, round	15 0
6-inch oblong	2 9
6-inch, oval, obscured	5 0
7½-inch, oval, obscured	8 0
9-inch, oval, obscured	12 0
10½ inch, oval, obscured	18 0
6½-inch, round, obscured	6 6
8-inch, round, obscured	10 6
9½-inch, round, obscured	18 0
11-inch, round, obscured	24 0
6-inch, oval	2 9
7½-inch	5 6
9-inch	8 0
10½-inch	15 0
5-inch, round, obscured	2 9
6-inch, round, obscured	4 6
7½-inch, round, obscured	8 0
9-inch, round, obscured	13 6
11-inch, round, obscured	24 0

DISHES—continued.

	Per dozen. s. d.
6-inch, oval, obscured	4 3
7½-inch, oval, obscured	7 6
9-inch, oval, obscured	12 0
10½-inch, oval, obscured	19 0
5-inch, round	2 9
6-inch, round	6 0
7½-inch, round	10 6
9-inch, round	17 0
11-inch, round	28 0
6-inch, oval, obscured	5 0
7½-inch, oval, obscured	8 0
9 inch, oval, obscured	12 0
10½-inch, oval, obscured	18 0
6½-inch, round, obscured	6 6
8-inch, round, obscured	10 6
9½-inch, round, obscured	18 0
11-inch, round obscured	24 0
6-inch round-handled	6 6
7½-inch round-handled	9 0
6-inch, oval	2 3
7½-inch, oval	4 6
9-inch, oval	7 6
10½-inch, oval	12 0
6½-inch, round	4 6
8-inch, round	8 6
9½-inch, round	14 0
11-inch, round	20 0
6-inch, oval, obscured	3 6
7½-inch, oval, obscured	6 3
9-inch, oval, obscured	10 0
10½-inch, oval, obscured	15 0
6½-inch, round, obscured	6 6
8-inch, round, obscured	10 6
9½-inch, round, obscured	18 0
11-inch, round obscured	24 0
6-inch, oval	2 3
6-inch, oval	2 4
7½-inch, oval	3 9
9-inch, oval	5 3
10½-inch, oval	10 0
6-inch, round	3 6
7½-inch, round	6 9
9 inch, round	10 0
11-inch, round	18 0
6-inch, oval, obscured	4 3
7½-inch, oval, obscured	8 0
9-inch, oval, obscured	12 0
10½-inch, oval, obscured	19 0
6-inch, round, obscured	6 0
7½-inch, round, obscured	10 6
9-inch, round, obscured	17 0
11-inch, round, obscured	28 0
6-inch, oblong	2 9
6-inch, oval	2 6
7½-inch, oval	5 0
9-inch, oval	7 6
10½-inch, oval	14 0
6-inch, round	4 0
7½-inch, round	7 6
9-inch, round	13 6
11-inch, round	24 0
6-inch, oval, obscured	5 0
7½ inch, oval, obscured	8 0
9-inch, oval, obscured	12 0
10½-inch, oval, obscured	19 0
6-inch, round, obscured	6 0
7½-inch, round, obscured	10 6
9-inch, round, obscured	17 0
11-inch, round, obscured	28 0
Salad dish	6 0
Salad dish, obscured	8 0
6-inch, oval	2 6
7½-inch, oval	5 0
9-inch, oval	8 0
10½-inch, oval	15 0
5-inch, round	2 0
6-inch, round	4 3
7½-inch, round	7 6
9-inch, round	13 6
11-inch, round	24 0

Comports are made to this service.

6 inch, oval, obscured	3 6
7½-inch, oval, obscured	6 2
9-inch, oval, obscured	10 0

DISHES—continued.

	Per dozen. s.	d.
10½-inch, oval, obscured	15	0
5-inch, round, obscured	2	8
6-inch, round, obscured	4	2
7½-inch, round, obscured	8	0
9-inch, round, obscured	12	3
11-inch, round, obscured	21	6
Side dish	4	0
6-inch, oval	2	4
7½-inch, oval	5	2
9-inch, oval	7	6
10½-inch, oval	14	0
5-inch, round	2	3
6-inch, round	3	2
7½-inch, round	7	6
9-inch, round	11	6
11-inch, round	24	0
Comports are made to this service—see comports.		
7½-inch, bowl, obscured	7	0
12-inch, flat, round	18	0
12-inch, flat, oval	12	0
	3	2
6-inch, oval	2	4
7½-inch, oval	5	2
9-inch, oval	7	6
10½-inch, oval	14	0
5-inch, round	1	9
6-inch, round	3	2
7½-inch, round	7	6
9-inch, round	11	6
11-inch, round	24	0
	2	0
Oblong dish	5	6
Oblong dish	2	0
Oval dish	2	0
5-inch, round	1	10
6-inch, round	3	0
7-inch, round	5	0
8-inch, round	7	6
6-inch, oval	2	3
8-inch, oval	4	6
10-inch, oval	8	6
Oblong	9	0
Oval	7	0
Oval	6	0
Oval	3	0
Oval	4	3
	5	6
Oblong	3	3
	1	3
	1	0
Scalloped bowl	4	0
Oval	3	6
8-inch square	7	0
5-inch square	3	9
8-inch dish	7	6
5-inch dish	3	0
5-inch dish, round	2	3
8-inch dish	6	6
5-inch dish	2	0
6-inch bowl	3	6
8-inch dish	4	6
9-inch dish	5	9
Square dish	1	0

DISHES.

For centers and stands.

12-inch			44	0
12-inch			72	0
11½-inch			54	0
12-inch, and celery stand			52	0
12-inch, and stand			52	0
10-inch, and stand			24	0
11-inch, and stand			42	0
13-inch	54	0	114	0
Stand (salad bowl)	60	0		
13-inch	54	0	74	0
Stand (large celery)	20	0		
12-inch	36	0	46	0
Stand (large celery)	10	0		
10½-inch	20	0	32	0
Stand (small celery)	12	0		
9-inch	10	0	22	0
Stand (small celery)	12	0		
10½-inch	20	0	28	0
Stand (sugar)	8	0		
9-inch	10	0	18	0
Stand (sugar)	8	0		

DISHES—continued.

	Per dozen. s.	d.
11-inch	24	0
Stand (celery)	18	0
9½-inch	15	0
Stand (sugar)	7	0
8-inch	5	0
Stand (sugar)	2	8
10½-inch	9	0
Stand (sugar)	4	8
10½-inch	9	0
Stand (celery)	10	6
11½-inch	15	0
Stand (celery)	10	6
9-inch	18	0
Stand (sugar S)	4	6
9-inch	18	0
Stand (7-inch vase)	7	6
11-inch	24	0
Stand (sugar L)	8	0
11-inch	24	0
Stand (10-inch vase)	13	0
11-inch	24	0
Stand (celery)	13	0
9-inch	13	6
Stand (sugar S)	4	0
11-inch	24	0
Stand (sugar L)	7	0
11-inch	24	0
Stand (celery)	12	0
9-inch, obscured	17	0
Stand (sugar S)	5	0
11-inch, obscured	28	0
Stand (sugar L)	8	6
11-inch, obscured	28	0
Stand (celery)	15	0
11-inch	24	0
Stand (celery)	14	0
11-inch	24	0
Stand (sugar L)	8	6
9½-inch	18	0
Stand (sugar S)	5	6
11-inch, plain	20	0
8-inch, comport, plain	14	0
9½-inch, plain	14	0
7-inch comport, plain	9	6
8-inch, plain	8	6
6-inch, comport, plain	6	6
6½-inch, plain	4	6
5-inch, comport, plain	3	9
11-inch, obscured	24	0
8-inch, comport, obscured	18	0
9½-inch, obscured	18	0
7-inch, comport, obscured	12	0
8-inch, obscured	10	6
6-inch, comport, obscured	8	0
6½-inch, obscured	6	6
5-inch, comport, obscured	5	0
9-inch	10	0
Stand (sugar S)	3	9
11-inch	18	0
Stand (sugar L)	5	6
11-inch	18	0
Stand (celery)	12	0
9-inch, obscured	17	0
Stand (sugar S)	5	0
11-inch, obscured	28	0
Stand (sugar S)	7	0
11-inch, obscured	28	0
Stand (celery)	15	0
9-inch	13	6
Stand (sugar S)	3	9
11-inch	24	0
Stand (sugar L)	6	0
11-inch	24	0
Stand (celery)	13	0
9-inch, obscured	17	0
Stand (sugar S)	4	6
11-inch, obscured	28	0
Stand (sugar L)	8	0
11-inch, obscured	28	0
Stand (celery)	15	0
9-inch	13	6
Stand (sugar S)	3	9
11-inch	24	0
Stand (sugar L)	6	0
11-inch	24	0
Stand (celery)	11	9

Comports are made to this service.

DISHES—continued.

	Per dozen.			
			s.	*d.*
9-inch, obscured	12	3	16	1
Stand (sugar S.)	3	10		
11-inch	21	6	28	0
Stand (sugar L.)	6	6		
11-inch	21	6	32	1
Stand (celery)	10	7		

No mounted pieces to this service.
See comports to match.

DISHES AND COVERS.

DRAMS.

	2	6
	2	0

EGG CUPS.

	1	0
	1	0
	0	8

FINGER CUPS.

Cut flutes and star	14	0
To match decanter 664	5	0
	4	6
Diamonds	3	0
Obscured	6	0
Plain	5	0
A Colored	6	0
D Cut mirrors	8	6
	4	3
	3	4
Turquois edge	18	0
	2	8

FLOWER POTS.

	Best colors.			
Frosted	21	6	16	0
	20	0	15	0
			16	0

FLOWER STAND.

9-inch trumpet and stand	12	6
" obscured	15	0

GOBLETS.

¼-quart	5	0
½-pint, large	5	3
¼-quart	4	0
½-pint	4	6
¼-quart	4	0
½-pint	4	3
¼-quart	4	0
½-pint	4	0
¼-quart	4	0
½-pint	4	6
½-pint	4	3
¼-quart	4	6
¼-quart	5	0
¼-quart	6	0
½-pint	3	6
¼-quart, flutes	3	3
¼-quart, prisms	3	6
¼-quart, prisms	3	9
½-pint	5	0
½ pint, hollows	4	6
¼-quart, hollows	3	9
¼-quart	3	6
¼-quart	5	0
¼-quart to match	5	0
¼-quart	4	6
¼-quart to match	5	0
¼-quart	3	9
¼-quart to match	4	3
½ pint	5	0
½-pint	4	3
¼-quart	2	11
¼-quart	3	9
½ pint	5	3
½-pint	4	6
½-pint	4	9
½-pint	4	6

GOBLETS—continued.

	Per dozen.	
	s.	*d.*
½-quart, plain	5	9
	4	6
	4	0
	3	6
	4	3
	4	3
	5	3
A obscured	4	9
A obscured	6	0
½-pint	5	0
¼-quart	4	6
½-pint	4	0
	2	6
	4	0
	4	3
½-pint	3	9
½-pint	4	0
¼-quart	3	9
½-pint	4	3
½-pint	4	9
	4	4½
	3	9
	3	9

HONEYS OR MARMALADES.

See also Small Sugars and Covers.

Honey and cover, with spoon hole	8	6
Honey and cover, with spoon hole	6	9
A obscured	7	6
D obscured, and cut mirrors	9	6
Frosted, with or without spoon hole	4	0
Frosted, best colors	5	6
	3	8
	3	9
	4	0
	5	0

ICE PAILS AND DRAINERS.

Pail	15	0	18	0
Drainer	3	0		
Pail	8	0	9	8
Drainer	1	8		
Pail	6	6	7	6
Drainer	1	0		

INKSTANDS.

2¼-inch ink and cover	6	9
Less, to match	5	2
Less, to match	3	6
Less, to match	2	11
Less, to match	2	3
	2	11
	10	9
	7	9
2¼-inch	7	5
Less, to match	5	9
Less, to match	3	11
Less, to match	3	9
Less, to match	3	6
	8	2
Ink, cut cover	12	4
1¾-inch, plain fluted cover	4	5
2-inch	5	6
2¼-inch	7	5
2¼-inch	10	0
1¾-inch, cut cover	5	6
2-inch, cut cover	7	3
2¼-inch, cut cover	8	9
2¼-inch, cut cover	10	0
1¾-inch, cut diamond cover	6	11
2-inch, cut diamond cover	7	11
2¼-inch, cut diamond cover	10	0
2¼-inch, cut diamond cover	12	4
1¾-inch, plain unmelted cover	2	11
1¾-inch, plain unmelted cover	3	11
2-inch, plain unmelted cover	5	0
	4	0
	10	9
	8	0

JUGS.

Quart	20	0
Pint	13	0

JUGS—continued.

	Per dozen. s.	d.
Quart	14	0
Pint	10	0
½-pint	5	0
Pint	7	0
Cover	2	0
Quart	20	0
Pint	13	0
½-pint	6	6
	6	6
	3	6
	2	10
	2	3
Pint	8	0
½-pint	4	6
½-pint	4	6
Frosted	7	0
3-pint, pillar, new shape	22	0
Quart, pillar, new shape	16	0
Pint, pillar, new shape	12	0
3-pint, pillar, cut	30	0
Quart, pillar, cut	22	0
Pint, pillar, cut	16	0
3-pint jug, old shape	30	0
Quart jug, old shape	24	0
Pint jug, old shape	18	0
½-pint jug, old shape	12	0

FOR VENETIAN JUGS AND OTHER GOODS.

KNOBS.

Flint and common colors.

Knobs without screw same price as melted.

	Melted.	Unmelted.
1-inch	0 10	0 6
1½-inch	0 11	0 9
1¼-inch	1 0	0 9
1½-inch	1 3	1 0
2-inch	1 6	1 3
2½-inch	1 11	1 7
3-inch	4 0	3 6
¾-inch		0 7
1¾ inch	0 11	0 9
1¼-inch	1 1	0 9
1¼-inch	1 3	1 0
2-inch	1 6	1 3
2¼-inch	1 11	1 7
2¼-inch	2 9	2 6

LIQUOR BOTTLES.

To match decanter 664	12	0
To match cut neck	16	0
Pint	16	0
Quart	5	0
Pint	3	9

MARMALADES.

MEASURES.

	3	6
	2	9
	2	0
	1	3
	1	3
	0	8

MUSTARDS.

	2	9
	2	2
	2	6
	2	9
	2	9
	2	9
	2	3
	4	0
	2	6
	3	3
	2	6
	2	0
	2	3

MUSTARDS—continued.

	Per dozen. s.	d.
A Cut	7	6
B Cut	6	6
C Cut	4	6
D Cut	5	6
	2	6

MUSTARD LININGS.

	Best colors. s.	d.	s.	d.
	2	6	1	9
	3	0	2	0

Dark blue same price as best colors.

PAPER WEIGHTS.

	6	6	5	0
Star or feather	4	6	3	6
Plain	4	6	3	6
Star or feather	3	0	2	3
Plain	3	0	2	3

PIANO STANDS.

	6	6	5	0
	6	0	4	6
(Size less)	5	0	3	4
Star or feather	5	0	3	6
	5	0	3	6

PICKLES AND COVERS.

	9	6
	10	6
(Less, to match)	8	6
	8	6
	6	6
	12	6
	13	6
	9	6
Obscured	10	6
	9	6
Obscured	10	6
	4	9
Obscured	5	9
	9	6
Obscured	11	6
	9	6
Obscured	10	6
	9	6
Obscured	10	6

PICKLES AND COVERS (CUT).

B	18	6
B	22	6
B	23	6
B	34	6
Globe	20	6
Globe	24	6
Globe, obscured	27	6
	17	6
	19	6
	22	6
	20	6
	28	6

PILLAR GOODS.

3-pint decanter	22	6
Quart	13	6
Pint	9	6
½-pint	6	6
3-pint jug, old shape	30	0
Quart jug, old shape	24	0
Pint jug, old shape	16	6
½-pint jug, old shape	13	6
Quart caraffe and up	13	6
Pint caraffe and up	11	6
Pint caraffe and up, light	8	6
Pint caraffe and up, 926	8	0
Pint caraffe and up, 1580	4	0
Celeries, large	21	0
Celeries, small	15	0
3-pint jug (new shape, 1163)	22	6
Quart jug (new shape, 1163)	16	6
Pint jug (new shape, 1163)	12	0

PLATES AND BOWLS.

	Per dozen. s.	d.
6-inch plate	2	6
7-inch plate	3	6
5-inch bowl	2	6
6-inch bowl	3	6
Plate	0	8
Plate	3	6
Plate obscured	4	0
Plate	3	9
4-inch plate	1	0
5-inch	1	6
6-inch	2	6
7-inch	4	0
8-inch	6	0
9-inch	8	0
3-inch bowl	1	0
4-inch	1	6
5-inch	2	6
6-inch	4	0
7-inch	6	0
8-inch	8	0
3-inch plate	0	8
4-inch	1	0
5-inch	1	6
6-inch	2	0
7-inch	3	6
8-inch	4	0
9-inch	6	0
2-inch bowl	0	8
3-inch	1	0
4-inch	1	6
5-inch	2	0
6-inch	3	6
7-inch	4	0
8-inch	6	0
4-inch plate	1	0
5-inch	1	4
6-inch	2	2
7-inch	3	3
8-inch	4	3
9-inch	6	0
4-inch	1	0
5-inch	1	6
6-inch	2	6
7-inch	4	0
8-inch	4	9
9-inch	7	6
6-inch, to match dish 699	3	0
7-inch, to match dish 699	4	6
8-inch, to match dish 699	6	6
9-inch, to match dish 699	10	0
10-inch, to match dish 699	16	0
11-inch, to match dish 699	24	0
13-inch, to match dish 699	36	0
4-inch	0	8
4-inch	1	0
5-inch	1	4
6-inch	2	8
7-inch	3	0
8-inch	4	6
3-inch bowl	1	0
4-inch	1	4
5-inch	2	3
6-inch	3	0
7-inch	4	6
5-inch plate	1	9
6-inch	2	9
7-inch	4	0
8-inch	6	0
9-inch	7	6
10-inch	11	0
4-inch bowl	1	9
5-inch	2	9
6-inch	4	0
7-inch	6	0
8-inch	7	6
9-inch	11	0
5½-inch plate	3	0
7½-inch	4	0
9½-inch	8	0
7½-inch	2	6
7½-inch obscured	5	6
6-inch	2	9
7-inch	4	6
8½-inch	8	0
6-inch, obscured	3	9
7-inch, obscured	6	0

PLATES AND BOWLS—continued.

	Per dozen. s.	d.
8½-inch, obscured	10	6
4-inch bowl	1	0
4½-inch bowl	1	3
7½-inch plate	6	6
9-inch plate	10	6
11-inch plate	18	0
12½-inch plate	24	0
6-inch bowl	6	6
7½-inch bowl	9	0
5-inch plate	2	6
6-inch	3	6
7½-inch	4	9
9-inch	8	0
5-inch, obscured	3	6
6-inch, obscured	5	0
7½-inch, obscured	6	6
9-inch, obscured	10	6
8-inch	8	0
8-inch, obscured	10	6
7-inch	3	0
6½-inch bowl	5	6
5-inch plate	1	2
6-inch	1	6
7-inch	2	3
8-inch	3	0
9-inch	4	6
5-inch bowl	1	6
6-inch	2	3
7-inch	3	0
8-inch	4	6
4½-inch plate	1	9
5½-inch	2	3
6½-inch	3	6
8½-inch	7	6
4-inch bowl	1	9
5-inch	2	3
6-inch	3	6
7½-inch	7	6
7-inch plate	4	0
8½-inch	7	6
10-inch	13	6
12-inch	24	0
7 inch plate, obscured	6	0
8½-inch plate, obscured	10	6
10-inch plate, obscured	17	0
12-inch plate, obscured	28	0
5½-inch	2	0
7-inch	4	3
8-inch	7	6
10-inch	13	6
12-inch	24	0
5½-inch, obscured	2	8
6½-inch, obscured	4	2
8½-inch, obscured	8	0
10-inch, obscured	12	2
12½-inch, obscured	21	6
4½-inch, frosted	0	9
4½-inch, frosted	1	0
5½-inch frosted	1	2
6½-inch, frosted	2	0
8-inch, frosted	3	0
5½-inch	2	3
7-inch	3	2
Plate	3	2
Bowl	3	2
Bowl	2	0
5-inch	1	3
6-inch	2	0
7-inch	2	6
8-inch	4	0
9-inch	6	6
Plate	5	6
Bowl	4	0
6-inch plate	2	0
7-inch plate	2	6
8-inch plate	4	0

POMADE AND COVER.

	Best colors.			
	2	3	1	8

POTTING POTS.

4-inch pot	2	6	5	0
5-inch plate	2	6		
4½-inch pot	3	0	6	0
6-inch plate	3	0		

POTTING POTS—continued.

	Per dozen. s.	d.	s.	d.
5-inch pot	4	6	9	0
7-inch plate	4	6		

SALAD BOWLS.

9-inch	60	0
6-inch	12	0
8½-inch	30	0
	16	6
Obscured on foot	12	0
Obscured	26	0
	26	0
Obscured	30	0
Obscured	26	0
	22	0
Obscured	26	0

SALTS (Cut.)

Oval, large	12	0
Oval, small	8	0
Oval, large	16	0
Oval, small	11	6
Round	9	6
Oval, large	12	0
Oval, small	8	0
Oval, large	11	0
As 651, with concaves	2	9
Small	1	3
Small	7	0
Round, large	7	6
Round, small	5	3
Round, large	8	0
Round, small	6	0
Round, large	14	6
Round, small	10	6
Round, large	12	3
Round, small	9	0
Round, large	12	3
Round, small	9	0
Round, large	9	3
Round, small	6	9
Round, large	7	9
Round, small	5	9
Round, large	9	3
Round, small	6	9
A	9	0
B	7	6
C	12	0
A	8	9
B	7	3
C	11	9
A	10	0
B	10	0

SALTS (moulded).

Oval	0	8
Oblong	2	0
Round	2	6
Round	2	3
Oblong	0	8
Oblong	1	9
Round	2	6
Oblong	3	0
Round	3	4
Round	2	3
Oblong	2	8
Oblong	2	8
Round	3	0
Round	3	6
Round	1	8
Round	2	2
Oblong	2	0
Round	1	0
Oblong	3	4
Oblong	2	10
Round	0	7
Oval	0	9
Oval	1	0
Round	3	0
Round, large to match	4	0
Oblong	2	6
Oblong	2	6
Round	2	0
Small	1	3
As 651, with concaves	2	0
Small	1	3

SALTS (moulded)—continued.

	Per dozen. s.	d.
Round	1	6
Small unmelted	1	0
Oval, to match 677	1	1
Oval, to match, unmelted	1	1
Round	2	6
Round	2	6
Oval, diamonds, plain top	2	9
Oval, mirror top	2	9
Oval, diamond top	2	9
Round, to match 709	2	9
Round, to match 709½	2	9
Round, to match 709¼	2	9
Round, small	1	3
Round, small	1	3
Round, small	1	3
Round, small, unflatted	1	3
Round, small, unflatted	0	7
Oval, large	2	0
Oval, small	1	0
Round, large	2	0
Round, small	1	3
Oval	4	0
Round	4	0
Oval	4	0
Oval	1	0
Oval	1	0
Oblong	0	4
Oblong	1	6
Oblong, obscured	3	0
Round, on foot	4	0
Oval, on foot	4	0
A obscured, on foot	4	0
Oval, on foot	3	6
	3	6
Double	1	6
Round	1	0
Oval	1	0
Oval	2	0
Large	2	0
Small	1	3
Large, obscured	2	0
Small, obscured	1	3
Round, large	2	4
Round, small	1	3
Round, large obscured	2	0
Round, small obscured	1	3
Round	4	6
Oval, large	2	6
Oval, small	1	4
	3	0
Round	2	6
Oval	2	6
Oval	1	6
Round	3	3
Round	2	0
Round	2	3
Round	1	9
Oval	0	10
Round, small pillar	2	2
Round, large	2	1
Round, small	1	3
Round	2	6
Round	2	6
Round	2	3
Round	2	9
Round	1	3
Round	1	3
Oval	1	3
Round	2	3
Oval	1	3

SALVERS.

Matches sugar 493	6	0
Smaller	4	0
	4	0
	4	0
	5	0
	5	0
	4	0
	6	0
	2	0
	4	0
Large	3	0
Small	2	0

SALVERS—continued.

	Per dozen. s.	d.
	4	0
	13	0
Obscured	17	0
	4	3
	4	0
	8	0
Large	9	6
Large obscured	4	6
Small	6	0
Small obscured	5	0
	6	6
Obscured	6	0
Large, plain	3	6
Small, plain	7	0
	5	0
Obscured	5	8
Obscured	7	6
	7	0
	5	0
	3	6
	5	0
	4	10
	3	9
	2	9
	2	7
	2	3
	3	6
	5	0
	4	6
	4	6
	2	10
	2	9
	3	7
	5	0
	3	9
	5	6
	3	0
	4	9
	3	9
	3	6
	3	3

SARDINE FISH.

	4	0

SAUCERS AND TUMBLERS.

Tumbler	1	4
Saucer	2	3
Tumbler	1	4
Saucer	2	3

SPILLS.

	Best colors.			
Basket	3	9	2	6
On three feet	3	9	2	6

See vases, &c.

SUGARS AND CREAMS.

Sugar, small, matches butter 433			3	9
"	5	0		
Cream	3	2	4	1
Sugar	3	9		
Cream	3	1	3	5
Sugar	6	11		
Cream	4	5	5	8
Sugar	5	8		
Cream	3	4	4	6
Sugar, small, to match 498	3	8		
Cream	2	8	3	2
Sugar	4	9		
Cream	3	1	8	11
Sugar	6	6		
Cream	4	0	5	3
Sugar	6	0		
Cream	4	0	5	0
Sugar	4	6		
Cream	3	0	3	9
Sugar	3	9		
Cream	2	1	2	11
Sugar	1	8		
Cream	1	4	1	6

SUGARS AND CREAMS—continued.

	Best colors.		Per dozen. s.	d.
Sugar	3	10		
Cream	2	4	3	2
Sugar, small	2	3		
Cream	1	7	2	5
Sugar	6	0		
Cream	4	0	5	0
Sugar	5	0		
Cream	3	6	4	3
Sugar	5	0		
Cream	3	6	4	3
Sugar, small	1	10		
Cream	1	4	1	7
Sugar	5	6		
Cream	3	6	4	6
Sugar	4	4		
Cream	3	0	3	8
Sugar	5	0		
Cream	3	6	4	3
Sugar	6	0		
Cream	3	0	4	6
Sugar	4	4		
Cream	3	4	3	10
Sugar	4	10		
Cream	3	6	4	2
Sugar	4	0		
Sugar, on leg	8	0		
Cream	3	6	5	0
Sugar, on foot to match	6	6		
Cream	3	6	5	9
Sugar	4	0		
Sugar	6	0		
Cream	2	6	4	3
Sugar	7	6		
Cream	5	0	6	3
Sugar, stand to 9 & 10½-in. dishes 813	8	0		
Cream	4	0	6	0
Sugar	6	0		
Cream	2	6	4	3
Sugar	6	0		
Cream	3	6	4	9
Sugar	2	4		
Cream	1	6	1	11
Sugar	3	6		
Cream	2	6	3	0
Sugar	4	0		
Cream	2	4	3	2
Sugar, stand to 9½-in. dish, 859	7	0		
Cream	4	0	5	6
Sugar	3	0		
Cream	1	6	2	3
Sugar	4	4		
Cream	2	6	3	5
Sugar	6	6		
Cream	4	4	5	5
Sugar	5	0		
Cream	2	6	3	9
Sugar, plain	5	6		
Cream, plain	4	6	5	0
Sugar, obscured	7	6		
Cream, obscured	5	6	6	6
Sugar, plain	5	6		
Cream, plain	4	6	5	0
Sugar, obscured	7	6		
Cream, obscured	5	6	6	6
Sugar, plain	5	6		
Cream, plain	4	6	5	0
Sugar, obscured	7	6		
Cream, obscured	5	6	6	6
Sugar	3	9		
Cream, 912	1	9	2	9
Sugar	2	7		
Cream, 912	1	9	2	2
Sugar	1	11		
Cream, 912	1	9	1	10
Sugar	6	0		
Cream	4	6	5	3
Sugar, obscured	7	3		
Cream, obscured	5	9	6	6
Sugar, large	6	0		
Sugar	5	6		
Cream	4	0	4	9
Sugar, plain	6	0		
Cream	2	8	4	4
Sugar, obscured	7	6		
Cream	4	0	5	9

SUGARS AND CREAMS—continued.

	Per dozen. Best colors.	s.	d.
Sugar	6 0	5	3
Cream	4 6		
Sugar	2 8	2	2
Cream	1 8		
Sugar	4 8	3	9
Cream	2 10		
Sugar	2 8	2	1
Cream	1 6		
Sugar, obscured	3 4	2	9
Cream	2 2		
Sugar, large	8 0	6	6
Cream, large	5 0		
Sugar, small	4 6	4	0
Cream, small	3 6		
Sugar, large	4 0	3	3
Cream, large	2 6		
Sugar, small	2 8	2	4
Cream, small	2 0		
Sugar, large	7 0	5	6
Cream, large	4 0		
Sugar, small	4 0	3	3
Cream, small	2 6		
Sugar, large, obscured	8 6	6	9
Cream, large, obscured	5 0		
Sugar, small	5 0	4	2
Cream, small	3 4		
Sugar, obscured, large cut mirrors	10 0	8	3
Cream, obscured, large cut mirrors	6 6		
Sugar, small, to match	6 6	5	7
Cream, small, to match	4 8		
Sugar	2 8	2	2
Cream	1 8		
Sugar, plain	7 6	5	3
Cream, plain	3 0		
Sugar, small, plain	4 6	3	3
Cream, small, plain	2 0		
Sugar, large, obscured	8 6	6	6
Cream, large, obscured	4 6		
Sugar, small, obscured	5 6	4	6
Cream, small, obscured	3 6		
Sugar	3 9	2	9
Cream	1 9		
Sugar, plain	4 6	3	9
Cream, plain	3 0		
Sugar, obscured	6 0	5	3
Cream, obscured	4 6		
Sugar plain	6 3	4	6
Cream, plain	2 9		
Sugar, obscured	7 9	5	9
Cream, obscured	3 9		
Sugar	5 6	4	3
Cream	3 0		
Sugar, obscured	7 0	5	9
Cream, obscured	4 6		
Sugar	5 3	4	3
Cream	3 3		
Sugar	4 0	3	3
Cream	2 6		
Sugar, large	5 6	4	3
Cream, large	3 0		
Sugar, small	3 6	2	6
Cream, small	1 6		
Sugar, large, obscured	7 0	5	6
Cream, large, obscured	4 0		
Sugar, small, obscured	5 0	4	0
Cream, small, obscured	3 0		
Sugar	5 6	4	3
Cream	3 0		
Sugar, obscured	6 0	4	9
Cream, obscured	3 6		
Sugar	6 0	4	6
Cream	3 0		
Sugar	5 0	4	0
Cream	3 0		
Sugar	5 3	4	0
Cream	2 6		
Sugar	7 6	5	3
Cream	3 0		
Sugar, large	6 0	4	10
Cream, large	3 8		
Sugar, small	3 9	2	11
Cream, small	2 1		
Sugar	4 0	3	2
Cream	2 4		
Sugar	3 9	3	0
Cream	2 3		

SUGARS AND CREAMS—continued.

	Per dozen. Best colors.	s.	d.
Sugar, large, obscured	8 6	6	3
Cream, large, obscured	4 6		
Sugar, small	4 6	4	0
Cream, small	3 6		
Sugar, large	6 0	4	6
Cream, large	3 4		
Sugar, small	3 9	3	0
Cream, small	2 1		
Sugar, obscured	7 0	5	3
Cream, obscured	4 4		
Sugar, large	5 6	4	6
Cream, large	3 6		
Sugar, small	3 0	2	3
Cream, small	1 6		
Sugar, large, obscured	6 6	5	3
Cream, large, obscured	4 0		
Sugar, small, obscured	3 10	3	11
Cream, small, obscured	2 0		
Sugar, large	4 0	3	1
Cream, large	2 2		
Sugar, small	3 2	2	4
Cream, small	1 6		
Sugar	3 4	2	5
Cream	1 6		
Sugar	3 0	2	1
Cream	2 4		
Sugar	4 0	3	2
Cream	2 4		
Sugar, large	3 6	2	9
Cream, large	2 0		
Sugar, small	3 0	2	3
Cream, small	1 6		
Sugar	2 0	1	8
Cream	1 4		
Sugar	6 0	4	8
Cream	3 4		
Sugar	5 6	4	1
Cream	2 8		
Sugar	4 6	3	5
Cream	2 4		
Sugar, obscured	5 2	4	1
Cream, obscured	2 0		
Sugar	6 4	4	10
Cream	3 4		
Sugar	6 0	4	8
Cream	2 6		
Sugar	3 6	2	10
Cream	2 2		
Sugar	3 6	2	10
Cream	2 2		
Sugar	1 6	1	4
Cream	1 2		
Sugar	3 0	2	3
Cream	1 6		
Sugar	3 3	2	9
Cream	2 3		
Sugar	4 6	3	3
Cream	3 0		
Sugar, smaller	2 2	1	11
Cream, smaller	1 8		
Sugar, flanged	3 0	2	4
Cream, flanged	1 8		
Sugar	4 6	3	6
Cream	2 6		
Sugar	4 0	3	4
Cream	2 8		
Sugar	4 0	2	10
Cream	1 8		
Sugar	2 9	2	1
Cream	1 9		
Sugar	4 3	3	1
Cream	2 2		
Sugar	3 4	2	6
Cream	1 8		
Sugar	2 4	1	11
Cream	1 6		
Sugar	4 4	3	4
Cream	2 4		
Sugar	3 0	2	6
Cream	2 0		
Sugar	3 3	2	9
Cream	2 2		
Sugar, smaller	2 6	2	0
Cream, smaller	2 0		
Sugar	2 3	1	9
Cream	1 3		

SUGARS AND CREAMS—continued.

	Best colors.	Per dozen. s. d.
Sugar, obscured	2 6	2 0
Cream, obscured	1 6	
Sugar	2 6	2 0
Cream	1 6	
Sugar	2 4	1 11
Cream	1 6	
Sugar	2 4	1 11
Cream	1 6	
Sugar	2 0	1 8
Cream	1 4	
Sugar	3 0	2 6
Cream	2 0	
Sugar	4 6	3 5
Cream	2 4	
Sugar	4 0	2 11
Cream	1 10	
Sugar	4 0	3 2
Cream	2 4	
Sugar	3 0	2 6
Cream	2 0	
Sugar	2 4	2 0
Cream	1 8	
Sugar	3 9	2 9
Cream	1 9	
Sugar	2 6	2 0
Cream	1 6	
Sugar	2 6	2 1
Cream	1 8	
Sugar	2 6	2 2
Cream	1 10	
Sugar	3 6	2 7
Cream	1 8	
Sugar	3 4	2 8
Cream	2 0	
Sugar	3 4	2 8
Cream	2 0	
Sugar	3 4	2 8
Cream	2 0	
Sugar	4 0	3 0
Cream	2 0	
Sugar	3 6	2 9
Cream	2 0	
Sugar	4 0	3 0
Cream	2 0	
Sugar	3 6	2 8
Cream	1 10	
Sugar	4 0	3 0
Cream	2 0	
Sugar	4 6	3 3
Cream	2 0	
Sugar	3 6	2 9
Cream	2 0	
Sugar	4 9	3 8
Cream	2 7	
Sugar	4 0	3 1
Cream	2 2	
Sugar	3 10	2 11
Cream	2 0	
Sugar	2 0	1 6
Cream	1 0	
Sugar	2 6	2 0
Cream	1 6	
Sugar	3 8	2 9
Cream	1 10	
Sugar	2 8	2 2
Cream	1 8	
Sugar, small	4 4	3 6
Cream, small	2 8	
Sugar, small	2 4	1 11
Cream, small	1 6	
Sugar, small	3 0	2 4
Cream, small	1 8	
Sugar	3 4	2 7
Cream	1 10	
Sugar	2 4	2 0
Cream	1 8	
Sugar	3 2	2 5
Cream	1 8	
A. Sugar	4 2	3 5
Cream	2 8	
B. Sugar	11 9	10 3
Cream	8 9	
C. Sugar	12 3	10 9
Cream	9 3	
D. Sugar	16 9	14 6
Cream	12 3	

SUGARS AND CREAMS—continued.

	Best colors.	Per dozen. s. d.
E. Sugar	12 3	10 9
Cream	9 3	
F. Sugar	16 9	14 6
Cream	12 3	
Sugar	3 6	2 9
Cream	2 0	
Sugar	4 6	3 3
Cream	2 0	
Sugar	2 6	2 0
Cream	1 6	
Sugar	2 4	1 9
Cream	1 2	
Sugar	2 10	2 2
Cream	1 6	
Sugar	2 8	2 1
Cream	1 6	
Sugar	3 4	2 5
Cream	1 6	
Sugar	2 6	2 0
Cream	1 6	
Sugar	3 3	2 6
Cream	1 9	
Sugar	3 0	2 3
Cream	1 6	
Sugar, small	1 0	
Sugar, small	1 0	

SUGARS AND COVERS.

		10 6
		10 0
		8 0
		9 0
		9 6
		10 6
		9 0
		10 0
		12 0
		6 6
		8 6
		6 0
		9 0
Obscured		12 0
		9 6
Obscured		12 6
Sugar and cover	5 9	8 9
Plate	3 0	
Sugar and cover	4 3	6 6
Plate	2 3	
Sugar and cover	3 3	5 6
Plate	2 3	
Sugar and cover		7 6
Sugar and cover		11 6
A. Obscured		14 6
Obscured		6 0
A. Obscured		7 6
D. Obscured and cut mirrors		9 6
Sugar and cover		8 0
Sugar and cover		8 0
Sugar and cover, obscured		10 0
Sugar and cover		11 0
Sugar and cover, obscured		13 0
Sugar and cover		8 6
Sugar and cover, obscured		10 9
		8 0
Obscured		10 6
		9 0
Obscured		12 0
		9 0
		7 0
		10 0
Obscured		13 0
		9 0
Large		9 9
Small		6 0
Obscured		12 6
		9 6
		12 6
		7 2
Obscured		9 10
		9 0
Obscured		10 6
Large		6 6
Small		5 2
		6 6
Large		5 6

SUGARS AND COVERS—continued.

	Per dozen. s.	d.
Small	5	0
	7	6
	6	6
Obscured	7	10
	5	4
	5	1
	7	6
Smaller	3	5
Smaller, flanged	5	4
	7	3
	5	9
	5	4
	3	9
	7	8
	5	0
	5	6
Smaller	4	2
	4	0
	4	0
	3	6
	3	6
	5	3
	6	9
	6	9
	5	9
	4	3
	4	6
	4	0
	5	0
	4	10
	5	4
	5	4
	6	0
	5	0
	6	3
	4	10
	5	10
	6	6
	5	6
	6	6
	6	0
	5	7
	5	8
	4	8
	6	4
	4	4
	5	7
	7	0
	3	0
	4	9
	4	6
	5	6
	4	0

SUGAR, COVERS, AND PLATES.

Best colors.		s.	d.
Sugar and cover	5 9	8	9
Plate	3 0		
Sugar and cover	4 3	6	6
Plate	2 3		
Sugar and cover	3 3	5	6
Plate	2 3		
Sugar and cover	7 6	10	0
Plate, 7½-inch	2 6		
Sugar and cover	11 6	19	6
Plate, 8½-inch	8 0		
A Sugar and cover, obscured	14 6	25	0
Plate, 8½-inch, obscured	10 6		
Sugar and cover, obscured	13 0	23	6
Plate, 9-inch, secured	10 6		
Sugar and cover	9 0	12	0
Plate	3 0		
Sugar and cover, obscured	12 6	23	0
Plate, 8½-inch, obscured	10 6		
Sugar and cover, obscured	10 6	14	8
Plate, 6½-inch, obscured	4 2		
Sugar and cover, large	6 6	9	8
Plate, 7-inch, 1074½	3 2		
Sugar and cover, small	5 2	7	5
Plate, 5½-inch, 1074½	2 3		
Sugar and cover, large	6 11	8	11
Plate, 6½-inch, 1074	2 0		

SUGAR, COVERS, AND PLATES—continued.

Best colors.		Per dozen. s.	d.
Sugar and cover, small	5 0	6	
Plate, 5½-inch, 1074	1 3		
Sugar and cover	7 8	9	
Plate, 6½-inch, 1074	2 0		
Sugar and cover	5 0	7	0
Plate, 6½-inch, 1074	2 0		
Sugar and cover	4 0	6	
Plate, 6 inch, 822	2 3		

SWEETMEATS.

	4	0
Matches sugar 794	4	6
Turn-over edge	4	6
Matches sugar 918	7	0
	3	6
Obscured	5	0
Obscured	5	0
Plain	4	0
A Obscured	5	6
D Cut mirrors	7	0
	3	0
Obscured	4	
	7	0
Obscured	5	
	3	
Handled	7	6
Handled, best colors	4	6
	7	0

Best colors.			
5-inch	2 3	1	7
6-inch	3 4	2	4
	3 4	2	7
	2 8	2	0
		3	6
		2	6
		2	6
		2	9
		2	5
		1	9
		2	0
		1	6
		1	6

TOBACCO JARS.

	s.	d.	
Body	3 3	5	0
Plug	0 9		
Cover	1 6		
Body, obscured	3 9	6	3
Plug, obscured	0 9		
Cover, obscured	2 0		
Body	5 0	7	6
Plug	1 6		
Cover	1 3		

TOILET SETS.

	Per set.
7 pieces	2 7

	Per dozen.
Brush tray	12 0
Puff-box	5 0
Pomade, round	4 6
Pomade, oval	5 6
Jewel tray	1 6
Pin tray	1 6
Ring stand	2 6
Round dish	15 0
Candlestick	3 0

VASES.

Best colors.	s.	d.	s.	d.
Flower vase	5 6		4	6
Less, to match	3 6		2	6
Less, to match	2 9		2	0
Vase, or spill	3 6		2	6
Vase	3 6		2	6
Vase, 9-inch	8 0		6	0
Vase, 8-inch	5 9		4	7
Vase, 7-inch	4 6		3	3
Vase	8 0		6	0
Vase, 7½-inch	4 0		3	0
Vase, 9-inch	6 9		5	0
Vase, 7½-inch, obscured			7	6
Vase, 10-inch, obscured			12	0

VASES—continued.

	Per dozen. Best colors.	
	s. d.	s. d.
Vase, 6-inch, obscured	3 6	2 9
Vase, 7½-inch, obscured	5 6	4 6
Vase, 9-inch, obscured	8 0	6 6
Vase, 6-inch, obscured, cut neck	4 3	3 6
Vase, 7½-inch, obscured, cut neck	6 9	5 6
Vase, 9-inch, obscured, cut neck	9 3	7 9
Vase, 7½-inch	7 0	5 0
Vase, 9-inch	11 0	8 0
Vase, 7½-inch, obscured		6 6
Vase, 9-inch, obscured		10 0
Vase, 7½-inch, obscured, cut mirrors		8 6
Vase, 9-inch, obscured, cut mirrors		12 0
Vase, 4½-inch, plain	2 9	2 0
Vase, 6-inch, plain	4 0	3 0
Vase, 8-inch, plain	7 6	5 6
Vase, 4½ inch, obscured		2 6
Vase, 6-inch, obscured		3 9
Vase, 8-inch, obscured		6 6
Vase, 6-inch, obscured	5 6	4 0
Vase, 8-inch, obscured	7 6	6 0
Vase, 10-inch, obscured	12 0	9 0

VASES—continued.

	Per dozen. Best colors.	
	s. d.	s. d.
Vase, 5-inch, plain	4 0	3 0
Vase, 6-inch, plain	6 8	5 0
Vase, 7-inch, plain	10 0	7 6
Vase, 5-inch, obscured		4 0
Vase, 6-inch, obscured		6 0
Vase, 7-inch, obscured		9 0
Trumpet and stand		12 6
Trumpet and stand, obscured		15 0
Vase, large	4 0	3 0
Vase, large, obscured	5 4	4 4
Vase, small	2 8	2 0
Vase, small, obscured	3 8	3 0
		1 3
		1 6

WINE AND LIQUEUR.

Wine		3 0
Liqueur		2 6
Wine		1 9
Wine, smaller		1 7

PRICE LIST OF TUMBLERS.

All tumblers are sent out with *cut* and *polished* bottoms. Tumblers—quantities of 25 dozen and upwards, of *one* pattern, are subject to a reduction of 1*d.* per dozen under 2*s.* 6*d.*, and 2*d.* per dozen 2*s.* 6*d.* and over. No reduction on tumblers under 1*s.*, or on *cut* or *engraved tumblers*. Tumblers in common colors, viz, blue, green, and amber, same price as flint (white), but they must be ordered in quantities of not less than 50*s.* in value, of *each* pattern in *each* color. These colors are not kept in stock, and such orders cannot be so promptly executed.

TUMBLERS.

	Per dozen. s. d.
¼-pint	0 9
Pint	3 4
¼-quart	1 9
½-pint	1 6
½-pint	1 2
½-quart	1 6
½-pint	1 6
½-pint	0 9
½-pint	0 10
½-pint	0 11
½-quart	1 9
Pint	2 11
½-quart, to match	2 0
½-pint	2 0
½-pint	2 11
½-pint	2 4
Bare ½-pint	1 9
½-quart	1 3
½-pint	1 1
½-pint, light	1 2
½-pint heavy	1 8
½-pint	2 0
½-pint	1 10
½-quart	2 2
½-quart	1 1
Large ½-pint	1 8
Small	1 2
Larger, to match	1 3
Larger, to match	1 7
½-pint	1 11
½-pint	2 1
Bare ½-pint	2 5
Bare ½-pint	3 0
½-quart	1 9
½-pint	1 9
Less, to match	1 6
Less, to match	1 4
Less, to match	1 2
½-quart	1 4
½-pint	2 3
½-quart	1 7
Bare ½-pint	1 7
½-pint	1 9
½-pint	0 11
Less, to match	1 5
Less, to match	1 4
Less, to match	1 1
Less, to match	1 11
½-pint	1 6
½-quart, to match	1 6
½-quart, to match	1 9

TUMBLERS—continued.

	Per dozen. s. d.
½-quart, to match	1 11
½-pint	2 4
½-quart	3 0
½-quart	1 4
Bare ½-pint	1 1
½-quart	1 1
½-pint	2 2
½-pint	2 10
½-pint	3 0
Bare ½-pint	1 5
½-pint	1 11
½-pint	1 8
½-pint	2 3
½-quart	2 1
½-pint, to match	1 5
½-quart	2 0
Less, to match	1 7
Less, to match	1 2
Less, to match	1 2
Less, to match	1 0
Less, to match	0 11
Less, to match	0 11
Less, to match	0 9
Less, to match	0 8
½-quart	1 9
½-quart	1 9
½-quart	1 9
½-quart	1 8
½-quart	1 11
Less, to match	1 11
Less, to match	1 9
Less, to match	1 4
Less, to match	1 4
Less, to match	1 1
Less, to match	0 9½
Less, to match	0 8½
Less, to match	0 9
½-pint	2 0
Less, to match	2 0
Less, to match	2 2
½-pint	1 8
½-quart	1 7
½-quart	1 7
½-quart	1 7
½-pint, plain cylinder	2 11
Pint	2 3
Less, to match	1 6
Less, to match	1 2
Less, to match	1 1
Less, to match	0 11
½-quart	1 9

TUMBLERS—continued.

	Per dozen. s.	d.
½-quart	1	7
Pint	2	2
Less, to match	1	2
Less, to match	0	10
Less, to match	0	8
½-quart	2	8
Less, to match	2	1
Less, to match	2	0
Less, to match	1	7
Less, to match	1	4
Less, to match	1	1
½-quart	2	10
Less, to match	2	8
Less, to match	1	10
Less, to match	1	9
Less, to match	1	4
Less, to match	1	2
Bare ½ pint, horn shape	3	9
Small	0	10
Larger, to match	0	11
Larger, to match	1	1
Pint	2	11
Less, to match	2	5
Less, to match	2	0
Less, to match	1	9
Less, to match	1	4
Less, to match	0	11
Less, to match	0	10
Less, to match	0	9
Less, to match	0	8
Pint	4	3
Less, to match	2	4
P. B. to match	2	4
Less, to match	2	0
Less, to match	1	6
Less, to match	1	8
½-pint	3	9
Less, to match	3	4
Less, to match	2	6
Less, to match	2	5
Pint	2	10
½-pint, horn shape	2	5
½-pint, horn shape	2	11
½-pint, horn shape	2	6
Pint, soda water	3	0
½-quart, matches 468	2	5
½-pint, 10 flutes, heavy	2	2
½-pint, 8 flutes, heavy	2	2
½-pint, to match goblet 668	1	9
½-pint, 8 flutes, well bottom	3	6
½-pint, 6 high flutes	2	10
½-pint, 8 hollow flutes	2	4
½-quart, mirrors and splits	3	1
Large ½-pint, 8 high flutes	2	0
½-pint	1	10
½-quart, 6 flutes	2	4
½-quart, 6 flutes	2	7
½-quart, 6 flutes	1	7
½-quart, for saucers	1	4
½-quart, for saucers	1	4
½-pint	1	9
½-pint	1	9
½-pint	1	10
½-quart	2	8
½-quart	2	2
½-quart	2	2
½-quart	2	3
½-quart	2	3
½-quart	1	4
Less, to match	1	0
½-pint	1	6
½-pint	1	9
½-pint	1	8
½-quart	1	5
Less, to match	1	10
½-pint	1	9
½-pint	1	9
½-pint	1	7
½-pint	1	7
½-quart	1	7
½-quart	2	0
½-pint beaker	2	4
½-quart, fancy	0	10½
½-quart, taper	3	0
½-quart, taper	2	6
½-pint	1	7
½-pint	1	11

TUMBLERS—continued.

	Per dozen. s.	d.
½-pint	2	1
Nest into three for shipping:		
Pint, ship shape	2	3
½-quart	1	10
½-pint	1	7
Less, to match	1	2
Less, to match	1	1
Less, to match	0	11
Less, to match	0	10½
Less, to match	0	9½
Less, to match	0	8½
½-pint	1	2
½-quart	1	10
½-quart	1	3
½-quart, horn shape	2	0
½-pint, horn shape	1	9
½-quart, horn shape	1	6
½-pint, horn shape	1	4
½-pint, horn shape	1	1
½-quart, horn shape	1	8
½-pint, horn shape	2	0
Nest into three for shipping:		
Pint, taper shape	2	5
½-quart	1	10
½-pint	1	5
Less, to match	1	4
Less, to match	1	1
Less, to match	0	11
Less, to match	0	9½
Less, to match	0	9½
Less, to match	0	8½
½-quart	1	7
½-pint	1	10
½-pint, horn shape	2	9
½-pint	1	9
Bare ½-pint	1	7
Bare ½-pint	1	7
Bare ½-pint	1	9
Bare ½-pint	1	11
Bare ½-pint	1	11
Bare ½-pint, taper	2	4
Bare ½-pint	2	0
Bare ½-pint, taper	2	3
Full ½-pint	2	8
½-quart	1	7
Large ½-pint	2	5
½-pint, barrel shape	2	11
½-pint, barrel light	2	0
½-quart	2	3
½-pint	1	11
½-quart, to match	2	5
Pint, quill flute	2	9
½-quart, to match	2	4
½-pint	1	5
½-quart	1	4
½-pint	1	2
½-pint, horn shape	1	6
½-quart, to match	1	5
Bare ½-pint	1	4
½-quart	1	1
½-pint	1	4
½-pint	2	0
½-pint	2	11
½-pint	2	11
½-pint	1	11
Pint	3	6
½-pint	1	6
½-quart	1	5
Pint	3	2
½-quart	2	8
½-pint	1	11
½-pint	3	0
½-pint	2	0
½-pint	2	0
½-pint	1	10
½-pint	0	11
½-pint	1	7
½-pint	1	6
½-pint	2	6
½-pint	2	3
½-quart	2	6
½-quart	1	10
½-quart	2	6
½-quart	1	9
½-quart	1	8
½-quart	1	7
½-pint	2	0

TUMBLERS—continued.

	Per dozen. s.	d.
Pint	3	5
½-pint	2	0
½-pint	2	11
½-pint	1	7
½-quart, to match	1	6
½-pint	1	6
½-quart	1	9
½-pint	1	4
Pint	2	6
½ pint	1	2
½-pint	1	5
½-pint, barrel	2	6
½-pint	1	6
½-pint	1	9
½-pint	1	5
½-quart, to match	1	2
½-pint	1	1
½-pint	1	11
½-quart	1	3
½-quart, to match	1	1
½-quart	1	9
½-quart	1	4
½-quart, small	1	6
Quarter-pint	1	2
½-pint	1	4
½ pint	1	6
½ pint	1	9
½-quart, to match	1	4
½-pint	1	7
½-pint	1	7
½-pint	1	2
½-quart	1	9
Pint, to match	2	8
½-quart	1	2
½-pint	1	7
½-pint	1	7
½-quart, to match	1	5
½-pint	1	6
½-pint	1	8
½-quart	2	0
½-quart	3	0
½-quart, flanged shape	2	0
½-pint	2	2
½-pint	1	6
½-pint	2	3
½-quart	2	0
½-pint	2	3
½-pint	2	3
½-pint, obscured	3	4
½-pint	1	6
½-pint	1	2
½-pint	1	6
½-pint	2	1
½-quart, large	1	9
½-pint	2	2
½-pint	2	0
½-pint	2	0
½-pint	2	1
½-pint, obscured	2	10
½-pint	1	4
½-pint	1	6
Pint, frosted	3	3
½-quart, frosted	2	4
½-pint, frosted	1	7
½-quart, frosted	1	2
½-pint, frosted	0	11
½-pint, plain	1	11
½-pint	0	11
Pint	3	0
Pint	2	7
Bare ½-pint	1	9
Stamped ½-pint	1	5
Bare ½-pint	1	9
Stamped ½-pint	1	5
Bare ½-pint	1	9
½-pint	1	0
½-pint	1	3
	0	8
½-pint	1	1
½-pint, star bottom	1	1
½-pint	0	10
½-pint, star bottom	0	10
½ pint	1	1
½-pint, star bottom	1	1
½-pint	1	1
½ pint, star bottom	1	1

TUMBLERS—continued.

	Per dozen. s.	d.
½-pint, stamp and star	1	2
½-pint, star bottom	1	2
½-pint, plain	1	2
½-pint, stamped, plain	1	2
Pint	2	3
Pint, star bottom	2	3
½-quart	1	4
½-quart, star bottom	1	4
Pint, star bottom	2	3
Pint	2	3
½-quart, star bottom	1	1
½-quart	1	1
½-quart, star bottom	1	7
½-quart	1	7
½-pint, star bottom	1	1
Small	0	11
½-quart	2	0
Bare ½-pint, star bottom	1	1
Bare ½-pint	1	6
Bare ½-pint, star bottom	1	6
½-pint	1	7
½-pint, star bottom	1	7
½-quart, star bottom	1	0½
½-quart	1	0½
½-quart, star bottom	1	0½
½-quart	1	0½
Pint, star bottom	2	4
Pint	2	4
½-quart	1	5
½-quart, star bottom	1	5
Bare ½-pint, star bottom	1	3
Bare ½-pint, pillars	1	2
½-quart	1	1
½-quart, star bottom	1	1
Bare ½-pint	1	3
Full ½-pint	1	5
Full ½-pint, star bottom	1	5
Plain	1	9
½-pint	0	8½
½-quart, star bottom	1	1
½-quart	1	1
½-quart, star bottom	1	1
½-quart	1	1
½-quart	1	6
½-quart, star bottom	1	6
½-pint, flat flutes	1	1
½-quart	1	0½
Cut bottom	1	8½
Flutes and splits	2	0
For South America:		
Hollows	1	4
Flat flutes	1	6
½-quart	1	1
Nest into two for shipping:		
Pint	2	5
Small to match	1	11
	1	6
	1	6
	1	3
	1	0
	0	10
	0	9
	0	8
Flat flutes	1	5
Flat flutes	1	3
Hollow flutes	1	3
Flat flutes	2	8
Pillars and prisms	1	11
Pillars and prisms	2	4
Nest into one for shipping to West Indies:		
	2	6
	1	9
	1	4
	1	1
	0	9
	0	8
½-pint	1	7
½-pint, cut bottom	1	11
Heavy prism sham	3	5
Heavy plain sham	2	1
Barrel	0	8
½-pint	1	4
½-quart	1	2½
Smaller	1	1
	1	3
	0	8

TUMBLERS—continued.

	Per dozen. s.	d.
½-pint, flutes and splits	1	2
½-quart, edge flutes	1	2
½-pint, narrow pillars	1	2
½-quart	2	0
½-quart, flat flutes	2	1
Plain	1	7
Plain	1	2
Plain, heavy sham	1	8½
Plain, heavy sham	1	9
Plain, heavy sham	2	4
Plain, heavy sham	1	5
Matches 1539	2	5½
Matches 1539	0	7½
Matches 1538	2	5½
Matches 1538	0	11½
Matches 1538	0	9
Matches 1538	0	8
Matches 1538	0	7½
Matches 1279½	1	4
Matches 1279½	0	11½
Matches 1279½	0	9
Matches 1279½	0	8
Matches 1279½	0	7½
Matches 410½	1	5
½-quart, plain flanged	1	3
Flat flutes	2	1
½-quart, plain	1	1
½-pint, patent etched	2	6
Large pint, plain	3	10
½-quart, flowered	1	3
½-quart, edge flute	1	5
½-quart, plain	1	5

TUMBLERS—ENGRAVED.

A B C D E F G H represent different patterns on these numbers. All at same prices.

½-pint, stamped and star	1	11
½-pint	1	11
Pint, star bottom	3	3
Pint	3	3
½-quart, star bottom	1	10
½-quart	1	10
½-quart, star bottom	1	7
½-quart	1	7
Pint, star bottom	3	4
Pint	3	4
½-quart	2	3
½-quart, star bottom	2	3

CUT TUMBLERS.

NOTICE.—No reduction for quantities on cut tumblers.

½-pint, flat flute	3	10
½-pint, flat flute and star	4	10
½-pint, edge flute	4	6
Full ½-pint, flat flute	4	6
Full ½-pint, flat flute and star	5	6
Full ½-pint flat flute, edge flute	5	3
Pint, flat flute	7	3
Pint, edge flute	8	3
½-quart, flat flute	5	3

CUT TUMBLERS—continued.

	Per dozen. s.	d.
½-quart, edge flute	6	0
½-quart, flat flute	3	0
½-pint, flat flute	4	3
½ pint, edge flute	5	0
½-pint, finger flute	4	2
½-pint, taper flute	5	0
½-quart, taper flat flute	4	6
½-quart, heavy flat flute	4	6
½-quart, horn, flute, splits and star bottom	7	6
½-quart, horn, flute, splits and plain bottom	6	3
½-pint, flat flute	5	6
½-quart, flat flute	5	9
½-quart, flat flute	4	6
½-pint, octagon	4	0
½-quart, octagon	5	0
½-pint, squat flat flute	3	3
½-pint, tall flat flute	3	3
½-pint, tall edge flute	3	6
½-pint, flat flute	2	9
½-pint, edge flute	2	9
Bare ½-pint, tall flat flute	2	9
Bare ½-pint, tall flat flute	1	8
Bare ½-pint, star flat flute	1	8
½-pint, tall flat flute star, ½-pint on bottom	2	3
½-pint, tall flat flute	2	3
½-pint, tall flat flute, ½-pint on bottom	2	3
½-pint tall splits and star	2	9
½-pint, tall splits	2	9
½-pint, tall splits and flutes, star	2	3
½-pint, tall splits	2	0
Pint, flat flute	4	6
Pint, flat flute star	4	6
½-quart, flat flutes	3	0
½-quart, flat flutes	2	0
Pints, splits and star	4	9
Pint, splits	4	9
Pint, splits and flutes, star	4	9
Pint, splits and flutes	4	9
½-quart, flat flute, star	2	1
½ quart, flat flute, star	2	1
½-quart, splits and star	2	7
½ quart, splits	2	7
½-quart, splits and flutes, star	3	1
½-quart, splits	3	1
½-quart, splits and star	3	7
½-quart, splits	3	7
½-quart, splits and flutes, star	3	7
½-quart, splits and flutes, star	3	7
½-quart, tall flat flute star	2	0
½-quart, tall flat flute,	2	0
½-quart, tall flat flute star	2	3
½-quart, tall flat flute	2	3
Bare ½-pint, flat flute	2	9
½-quart, tall, diamonds	4	9
Full ½-pint, flat flute	3	9
Pint taper, flat flute	4	9
½-pint, flat flute and splits	3	3
½-pint, edge	3	3
½-pint, flat flute	1	5
½-pint, flat flute hollow	1	8
½-pint, flat flute and split	1	9
Bare ½-pint, flat flute	2	3

QUEEN'S IVORY WARE AND BLANC DE LAIT.

	Price per dozen. s.	d.
Vase	12	0
Sugar	24	0
Cream	24	0
Basket	6	0
Cigar ash	2	3
Basket	5	3
Cover	5	3
Cake tray	22	6
Vase	30	0
Vase	13	6
Vase	13	6
Tub	3	9
Flower pot	54	0
Flower pot, flanged	54	0
Vase	5	3
Vase	3	4
Vase, small	6	9
Vase (see 1224 square in pattern book)	9	0
Vase	5	3
Vase	4	6
Bag	6	0
Vase	10	6
Vase	8	3
Candlestick	18	0
Candlestick	9	6
Vase bellows	5	3
Trough, half-circle	6	0
Trough, straight	6	0
Trough	6	0
7-inch candlestick	13	6
8-inch candlestick	24	0
Vase	3	9
Basket, closed	3	9
Basket, open	3	9
Vase	9	0
Vase	15	9
Trough	3	4
Vase	8	0
Vase	4	0
Vase	2	0
Sugar	4	6
Cream	2	6
Tile	12	0
Tile	12	0
Dessert-plate, large	25	6
Dessert-plate, small	15	0
Dessert comport, large	43	0
Dessert comport, small	25	6
Dessert set, 18 pieces	30	8
Salver, round	16	0
Salver, round, small	7	6
Salver, oval, small	7	6
Sugar	6	6
Cream	3	0
Vase	6	6
Tile	12	0
Tile	12	0
Sugar	5	0
Cream	3	0
Vase	5	0
Vase, open	3	9
Vase, closed	3	9
9-inch candlestick	24	0
6½-inch candlestick	12	0
Vase	3	9
Vase	3	6
Flower pot	39	0
Napkin ring	2	3
Vase	2	3
Vase	3	9
Dish	24	0
Vase	3	0
Dish	18	0
Trinket	3	9
Box	5	3
Box cover	3	9
Vase	2	3
Basket, closed	2	3
Basket, open	2	3
Vase	2	3
Vase, open	6	0
Vase, closed	6	0
Tray, large	18	0

	Price per dozen. s.	d.
Tray, small	9	6
Tea-cup	3	9
Saucer	6	0
Vase	2	3
Vase, open	5	0
Vase, closed	5	0
Vase	5	0
Bowl	30	0
Bowl	12	0
Vase	4	6
Trough	9	0
Vase	3	9
Vase	2	0
Vase	4	6
Vase	3	9
Tray	3	6
Vase	3	9
Vase	3	9
Vase	4	6
Vase	4	6
Vase	1	11
Candlestick	15	0
Vase	4	6
Vase	3	6
Vase	3	6
Vase	6	9
Vase	3	6
Vase	2	6
Vase	3	6
Vase	6	0
Bowl	21	0
Trinket	3	0
Basket	6	0
Sugar	6	6
Cream	3	6
Sugar	5	8
Cream	3	0
Sugar	7	6
Cream	4	0
Sugar	7	6
Cream	3	0
Vase	3	9
Vase	4	6
Vase	4	6
Vase	4	6
Vase	6	9
Bowl	7	6
Plate	8	0
Plate	9	6
Bowl	10	0
Bowl	21	0
Sugar	7	0
Cream	3	10
Butter	11	4
Cover	4	0
Bowl	3	0
Sugar	12	8
Cream	6	0
Sugar	9	9
Cream	5	3
Butter	14	6
Cover	8	0
Vase	3	6
Vase	3	9
Dish	6	0
Vase	6	6
Vase	3	0
Vase	5	3
Vase	5	9
Dish	21	0
Bowl, tripod	30	0
Bowl, three-cornered	30	0
Vase, square	4	0
Vase, tall	3	6
Vase, closed, 2 handles	4	0
Vase, open	4	0
Dish	4	6
Basket	4	6
Basket	3	0
Vase	5	9
Candlestick	6	9
Sugar	4	6
Sugar	4	6

PRICE-LIST OF OPAL, TURQUOISE, GOLD, JET, AND MALACHITE, AUGUST, 1881.

[Where no price is given the goods are not made. All the articles are drawn third size.]

Description of article.	Price per dozen. Flint.	Gold or jet.	Turquoise or opal.	Malachite
	s. d.	s. d.	s. d.	s. d.
Vase, small	2 0	2 0	2 0	6 0
Vase, large	3 0	3 0	3 0	9 0
Basket, small	1 6	1 6	2 0	2 6
Basket, large	3 0	3 0	4 0	.....
Spill	2 6	2 6	2 6	4 0
Flower-pot	15 0	15 0	15 0	20 0
8½-inch dessert plate	4 6	4 6	5 6	.....
10-inch dessert plate	.....	7 6	9 0	.....
8-inch dessert bowl	.....	4 6	5 6	.....
9-inch dessert bowl	.....	7 6	9 0	.....
8-inch dessert comport	.....	.....	12 0	.....
9-inch dessert comport	.....	.....	27 0	.....
Dessert set	.....	.....	14 0	.....
Sugar	4 6	.....	5 6	6 9
Cream	2 6	.....	2 10	3 3
Butter	5 6	.....	6 3	7 6
Sugar	3 4	.....	4 0	4 9
Cream	1 8	.....	1 10	2 3
Sugar	2 4	.....	3 0	3 6
Cream	1 6	.....	1 10	2 2
Ash-tray	.....	1 3	.....	.....
Flower-pot, small	.....	15 0	.....	18 0
Flower-pot, large	.....	18 0	.....	24 0
Vase, small	.....	2 6	.....	.....
Vase, large	.....	3 2	.....	.....
Vase, straight	.....	1 4	1 6	.....
Vase, flanged	.....	1 4	1 6	.....
Vase, taper	.....	1 4	1 6	.....
Vase	.....	1 6	1 6	.....
Vase, flanged	.....	1 6	1 6	.....
Vase	.....	2 0	3 6	.....
Vase	.....	1 10	1 10	.....
Vase, flanged	.....	1 10	1 10	.....
Basket, closed	.....	2 0	2 0	2 6
Basket, open	.....	2 0	2 0	2 6
Trough	.....	2 0	3 0	.....
Vase	.....	2 0	2 1	.....
Spill	.....	3 6	4 0	.....
Basket	.....	2 0	2 0	.....
Ash-tray	.....	0 9	1 0	.....
Vase	.....	2 6	3 0	.....
Vase, small	.....	3 0	3 0	5 0
Vase, large	.....	4 6	5 0	7 6
Vase	.....	2 3	2 3	2 6
Vase	.....	2 3	2 3	2 6
Basket	.....	1 6	1 6	.....
Basket	.....	1 9	1 9	2 6
Cover for do	.....	1 9	1 9	2 6
Basket	.....	1 9	1 9	.....
8½-inch cake-dish	.....	8 0	8 0	.....
Flower-stand	.....	12 0	12 0	.....
8½-inch dessert plate	.....	5 0	6 0	.....
10-inch dessert plate	.....	8 0	10 0	.....
8-inch dessert bowl	.....	5 0	6 0	.....
9-inch dessert bowl	.....	8 0	10 0	.....
8-inch dessert bowl	.....	.....	13 6	.....
9-inch dessert comport	.....	.....	33 0	.....
Dessert set	.....	.....	16 0	.....
Vase	.....	2 3	2 3	2 3
Vase	.....	1 9	1 9	.....
Basket	.....	3 6	4 0	.....
Vase	.....	2 6	2 6	.....
Vase	.....	1 6	1 6	.....
Vase	.....	1 6	1 6	.....
Vase	.....	1 6	1 6	.....
Flower-pot	16 0	20 0	30 0	.....
Vase	2 6	2 6	2 6	.....
Salt and lining	.....	.....	12 0	.....
Vase	.....	2 6	2 6	.....
Vase for hanging	.....	3 0	3 9	4 6
Basket, closed	.....	2 0	2 0	2 6

Description of article.	Price per dozen. Flint.	Gold or jet.	Turquoise or opal.	Malachite
	s. d.	s. d.	s. d.	s. d.
Vase	1 3	1 7	2 4	3 6
Basket	1 3	1 6	2 0	3 0
Trough	2 6	3 0	3 6	.....
Vase	.....	2 0	2 0	2 6
Vase	1 6	1 10	1 10	2 6
Trinket stand	.....	3 0	3 0	3 0
Basket	1 6	1 10	1 10	2 0
Vase	3 0	3 6	3 6	4 0
Jar for flowers	12 0	12 0	12 0	.....
Ditto, with cover	14 0	14 0	15 0	.....
Hot-water stand	2 6	2 6	2 6	3 6
7-inch candlestick	7 0	7 0	10 0	16 0
Jug	6 0	6 0	.....	12 0
Vase	2 6	3 0	3 0	.....
7-inch candlestick	8 0	8 0	12 0	14 0
7-inch candlestick, flat	3 9	3 6	4 6	6 0
Vase	1 9	2 0	2 0	2 6
Vase	2 0	2 6	2 6	3 0
Vase	1 6	1 10	1 10	2 0
Vase	1 6	1 10	1 10	2 0
Vase	1 6	1 10	1 10	2 0
Ink and cover	8 0	8 6	10 0	12 0
Trough (half-circle)	2 6	2 8	3 0	.....
4½-inch trough (straight)	2 6	2 8	3 0	.....
These troughs form the following:				
A, 2 pieces	5 0	5 4	6 0	.....
B, 4 pieces	10 0	10 8	12 0	.....
C, 6 pieces	15 0	16 0	18 0	.....
Vase	2 6	3 0	3 0	.....
Vase	2 6	3 0	3 0	3 0
Vase	2 0	2 6	2 6	2 6
Vase	.....	2 0	2 0	2 6
Vase	.....	2 0	2 0	2 6
Vase	.....	2 4	2 4	2 9
Vase	1 6	1 10	1 10	2 6
Vase	2 6	3 0	3 0	.....
Vase	1 6	1 9	1 9	2 0
Vase	2 6	2 9	2 9	3 0
Vase	.....	4 0	5 0	6 0
Vase	.....	3 0	4 0	6 0
7-inch candlestick	6 0	5 0	6 6	.....
Basket	.....	2 6	3 6	4 6
Vase	.....	1 8	1 8	2 6
Vase	.....	3 0	3 0	4 0
Vase	4 0	3 0	3 0	4 6
Trough	.....	3 0	3 0	4 6
8-inch candlestick	9 6	10 6	12 0	18 0
Vase	1 6	1 10	1 10	2 0
Round flower-pot	.....	.....	.....	30 0
Basket, closed	.....	.....	2 6	.....
Basket, open	.....	.....	2 6	.....
Vase	3 0	3 9	4 0	6 0
Trough	1 2	1 6	1 6	2 0
Vase	2 8	3 3	3 3	3 3
Vase	1 6	2 0	2 0	.....
Vase	0 10	.....	1 0	.....
Sugar	.....	.....	3 0	.....
Cream	.....	.....	1 8	.....
Sugar	2 10	.....	4 6	.....
Cream	1 4	.....	2 6	.....
Vase	.....	.....	4 0	5 0
Sugar	2 2	.....	3 4	.....
Cream	1 4	.....	2 6	.....
Vase	1 6	.....	1 6	.....
Candlestick	8 0	10 0	12 0	18 0
Candlestick	4 0	5 0	5 0	5 0
Vase	1 6	.....	1 6	.....
Vase	1 6	1 10	2 0	2 6
Bowl	1 6	1 10	2 0	2 6
Vase	1 6	1 10	2 0	2 6

Opal, turquoise, gold, jet, &c.—Continued.

Description of article.	Price per dozen. Flint.	Gold or jet.	Turquoise or opal.	Malachite.
	s. d.	s. d.	s. d.	s. d.
Basket, open	.....	2 0	2 0	2 6
Vase	.....	4 0	4 0	.....
8-inch candlestick	8 0	8 0	8 0	9 0
Vase	1 3	1 6	1 6	.....
Vase, flanged	1 3	1 6	1 6	.....
Tub for salt	1 3	1 6	1 6	.....
Vase	1 3	1 6	2 0	.....
Vase, flanged	1 3	1 6	2 0	.....
Flower-pot	18 0	18 0	18 0	24 0
Flower-pot, flanged	18 0	18 0	18 0	24 0
Vase	2 0	2 6	2 6	.....
Vase	2 6	2 6	2 6	3 0
Tub for salt	1 0	1 3	1 9	2 0
Vase	1 9	2 0	2 0	.....
Vase, small	2 3	2 10	4 6	6 9
Vase, large	4 6	5 8	10 0	15 0
Vase	1 9	2 0	2 0	2 6
Vase	1 3	1 7	1 7	2 6
Vase, small	2 3	2 10	4 6	6 9
Vase, large	4 6	5 8	10 0	15 0
Vase	2 0	2 3	2 3	.....
Trough	3 0	3 9	4 0	.....
Vase	4 0	5 0	5 0	.....
Vase	.....	.....	2 7	3 0
Vase	.....	.....	2 7	3 0
See 1224 Square in P. B.	2 6	3 0	3 0	.....
Trough	2 6	3 0	3 0	.....
Vase	.....	1 10	1 10	.....
Vase	.....	.....	2 7	3 0
Trough	.....	.....	2 7	3 0
Trough	3 0	3 9	4 0	.....
Vase	2 2	2 8	3 0	4 0
Vase	1 8	2 1	2 1	.....
Vase	2 2	2 8	3 0	.....
Vase	2 2	2 8	3 0	.....
Vase	1 9	2 0	2 0	2 0
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	2 0
Bag	2 0	2 6	2 6	3 0
Vase	1 6	1 10	1 10	.....
Vase	1 9	2 0	2 0	.....
Vase	1 9	2 0	2 0	2 6
Vase	1 9	2 0	2 0	2 6
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	.....
Vase	1 6	1 10	1 10	2 0
Vase	1 6	1 10	1 10	.....
Vase	2 6	2 9	2 9	4 8
Basket	1 3	1 7	1 7	2 0
Vase	1 6	1 10	1 10	1 10
Vase	1 6	1 10	1 10	1 10
Vase	1 6	1 10	1 10	1 10
Basket	1 6	1 10	1 10	1 10
Spill	1 8	2 1	2 1	3 0
Spill	1 6	1 10	1 10	2 0
Tub	1 3	1 7	1 7	2 0
Trough	2 6	3 0	3 0	.....
Vase	1 3	1 7	1 7	2 0
Vase, flanged	1 3	1 7	2 4	3 6

Description of article.	Price per dozen. Flint.	Gold or jet.	Turquoise or opal.	Malachite.
	s. d.	s. d.	s. d.	s. d.
Vase	.....	.....	.....	3 6
Vase	.....	.....	3 0	3 6
Vase	1 6	1 11	1 11	2 0
Vase	.....	.....	.....	5 0
Ring	1 0	1 3	1 3	.....
Match-box	1 3	1 6	.....	.....
Match-box	1 3	1 6	.....	.....
Vase	1 0	1 3	1 3	.....
Vase	.....	1 11	1 11	2 0
Dish	.....	9 0	12 0	.....
Vase	1 6	1 11	1 11	.....
Dish	.....	7 0	7 0	.....
Trinket	.....	1 9	1 9	2 0
Match-stand	.....	1 6	.....	.....
Box	.....	2 0	2 0	.....
Cover	.....	1 3	1 3	.....
Match-stand	.....	1 6	.....	.....
Vase	.....	1 3	1 3	.....
Basket (closed)	.....	1 3	1 3	.....
Basket (open)	.....	1 3	1 3	.....
Vase	.....	1 3	1 3	.....
Vase	.....	3 0	3 0	.....
Tray (large)	.....	7 6	12 0	.....
Tray (small)	.....	4 4	6 9	.....
Vase	.....	1 3	1 3	.....
Vase	.....	1 11	1 11	.....
Vase	.....	1 11	1 11	.....
Bowl	.....	.....	20 0	.....
Bowl	.....	.....	8 0	.....
Vase	.....	2 6	.....	.....
Salt	.....	1 11	.....	.....
Vase	.....	1 11	1 11	.....
Vase	.....	1 6	1 6	.....
Tray	.....	1 8	1 8	.....
Vase	.....	1 11	1 11	.....
Vase	1 6	1 11	1 11	.....
Vase	1 9	.....	3 0	.....
Vase	1 9	.....	3 0	.....
Vase	.....	.....	1 4	.....
Butter	.....	.....	4 3	5 0
Cover	.....	.....	1 9	2 0
Sugar	.....	.....	4 4	5 0
Cover	.....	.....	1 9	2 0
Cream	.....	.....	2 2	2 6
Candlestick	8 0	10 0	12 0	.....
Vase	1 9	.....	3 0	.....
Vase	2 6	.....	3 0	.....
Vase	1 6	.....	1 10	.....
Vase	.....	.....	1 6	.....
Vase	.....	.....	2 9	.....
Bowl	.....	.....	14 0	.....
Trinket	.....	.....	2 0	.....
Basket	.....	.....	4 0	.....
Sugar	.....	.....	3 0	.....
Cream	.....	.....	1 6	.....
Sugar	.....	.....	2 6	.....
Cream	.....	.....	1 6	.....
Sugar	.....	.....	3 6	.....
Cream	.....	.....	1 10	.....
Sugar	.....	.....	3 4	.....
Cream	.....	.....	1 4	.....
Dish	.....	12 0	.....	.....

VENETIAN.

These goods may be had in flint or venetian green (with turquoise tops).

	Price per dozen. s.	d.
Vase	6	0
Vase	8	0
Finger cup	18	0
Basket	15	0
Basket, open	15	0
Vase	15	0
Finger cup	18	0
½-pint jug	10	0
Pint jug	17	6
Quart jug	25	0
3-pint jug	37	6
Handled glasses for do. ½ pint	12	0
Handled glasses for do. pint	15	0
Same price as 1180½		
½-pint jug	16	0
Pint jug	28	0
Quart jug	34	0
Goblets for do. ½-pint	12	0
Goblets for do. ½-pint	15	0

The foregoing catalogue and prices will furnish complete information regarding the price of pressed goods made in this district. It is not practicable to get manufacturers' prices of foreign goods from retail dealers who are not importers; therefore I incorporate none.

The price of bottles manufactured in this district are as follows:

	Per dozen.
Ale and porter bottles, ½ pint	10*s.* 6*d.*
Ale and porter bottles, 1 pint	12*s.* 6*d.*
Wine and spirit bottles, 1 quart*	16*s.* 0*d.*

The old-fashioned black bottles are preferred to clear ones, notwithstanding a saving of at least 1*d.* per dozen in the price in favor of the white bottles.

The prices of lamp chimneys and gas funnels range from 1*s.* 4*d.* upwards.

Price list and particulars relating to the rolled and rough-cast plate glass of Sunderland, the sheet of Manchester, and the plate glass of South Shields are here inserted.

Prices of rolled and rough-cast plate in crates and squares at Sunderland, August, 1882.

Plain rolled plate.	⅛ inch.	3/16 inch.	¼ inch.	⅜ inch.
	Per foot net.	*Per foot net.*	*Per foot net.*	*Per foot net.*
In crates of stock sizes, for cutting up, and squares not above two feet	3 *d.*	4 *d.*	5 *d.*	7 *d.*
In squares above two feet	3½ *d.*	4½ *d.*	5½ *d.*	7½ *d.*

Rough-cast rolled, three-sixteenths, one-fourth, and three-eighths inch is supplied at same prices as rolled.

Tiles one-eighth, three-sixteenths, and one-fourth inch 4½*d.*, 5½*d.*, 6½*d.*, less 7½ per cent. discount.

Present prices of sheet-glass issued by the sheet-glass manufacturers, Manchester, July 29, 1882.

[Prices of sheet-glass, thirds and fourths, also obscured, fluted, and enameled, in crates.]

Description.	15 ounce.	21 ounce.	26 ounce.	32 ounce.
	Per foot net.	*Per foot net.*	*Per foot net.*	*Per foot net.*
Fourth quality in crates, usual size sheets	2*d.*	2¾*d.*	3¼*d.*	4¼*d.*
Third quality in crates, usual size sheets	2¼*d.*	3¼*d.*	4¼*d.*	5¼*d.*
Obscured in crates, usual size sheets	2¾*d.*	3¾*d.*	4¾*d.*	.....
Fluted in crates, usual size sheets	2¾*d.*	3¾*d.*	.....	.....
Enameled in crates, usual size sheets	2¾*d.*	3¾*d.*	.....	.....

* Really only about 1½ pints.

Prices of polished and rough-cast plate glass by the Tyne Plate Glass Company, South Shields.

Description.	Polished plate glass.		
	Ordinary glazing.	Best glazing.	Silvering quality.
	Per superficial foot.	*Per superficial foot.*	*Per superficial foot.*
In plates containing not above—	s. d.	s. d.	s. d.
1 foot, superficial	1 6	1 9	2 0
2 feet, superficial	1 8	1 11	2 3
3 feet, superficial	1 11	2 2	2 6
4 feet, superficial	2 1	2 4	2 8
5 feet, superficial	2 2	2 5	2 9
6 feet, superficial	2 4	2 7	2 11
7 feet, superficial	2 6	2 9	3 1
8 feet, superficial	2 7	2 11	3 3
10 feet, superficial	2 8	3 0	3 5
12 feet, superficial	2 9	3 1	3 6
14 feet, superficial	2 9	3 1	3 6
16 feet, superficial	2 9	3 1	3 7
18 feet, superficial	2 9	3 1	3 8
20 feet, superficial	2 9	3 1	3 8
25 feet, superficial	2 9	3 1	3 8
30 feet, superficial	2 10	3 3	3 9
35 feet, superficial	2 10	3 3	3 9
40 feet, superficial	2 10	3 3	3 10
45 feet, superficial	2 10	3 3	3 10
50 feet, superficial	2 11	3 4	4 0
55 feet, superficial	2 11	3 4	4 0
60 feet, superficial	2 11	3 4	4 2
65 feet, superficial	2 11	3 4	4 2
70 feet, superficial	3 0	3 5	4 4
75 feet, superficial	3 0	3 6	4 6
80 feet, superficial	3 0	3 8	4 9
85 feet, superficial	3 1	3 10	5 0
90 feet, superficial	3 2	4 0	5 4
95 feet, superficial	3 4	4 3	5 8
100 feet, superficial	3 6	4 6	6 0

Polished plate-glass of special thickness.

[Per superficial foot.]

Description.	¼ inch.	⅜ inch.	½ inch.	⅝ inch.	1 inch.
In plates containing not above—	s. d.	s. d.	d. s.	s. d.	s. d.
2 feet, superficial	4 2	4 7	5 0	5 9	6 0
4 feet, superficial	4 4	4 9	5 3	6 0	6 3
6 feet, superficial	4 6	5 0	5 6	6 3	6 6
9 feet, superficial	4 8	5 3	5 9	6 6	6 9
12 feet, superficial	4 10	5 6	6 0	6 9	7 0
15 feet, superficial	5 0	5 9	6 3	7 0	8 0
20 feet, superficial	5 3	6 0	6 6	7 6	9 0
25 feet, superficial	5 6	6 3	6 9	.....	.....
30 feet, superficial	5 9	6 6	7 0	.....	.....
35 feet, superficial	6 0	6 9	7 6	.....	.....
40 feet, superficial	6 3	7 6	8 6	.....	.....
45 feet, superficial	6 6	8 0	.....	.....	.....
50 feet, superficial	7 0	8 6	.....	.....	.....

Larger plates for special prices.

Rough-cast plate-glass, in thicknesses as under.

[Per superficial foot.]

Description.	¼ inch.	⅜ inch.	½ inch.	¾ inch.	1 inch.
In plates containing not above—	s. d.	s. d.	s. d.	s d.	s. d
1 foot	7	7½	8½	2 9	3 6
2 feet	7	7½	8½	2 11	3 8
3 feet	7½	8	9	3 1	3 10
4 feet	7½	8	9	3 2	3 11
5 feet	8	8½	9½	3 3	4 0
6 feet	8	8½	9½	3 3	4 0
7 feet	8½	9	10	3 4	4 1
8 feet	8½	9	10	3 4	4 1
9 feet	8½	9	10	3 5	4 2
10 feet	8½	9	10	3 5	4 2
15 feet	9	9½	10½	3 6	4 3
20 feet	9	10	11	3 6	4 3
30 feet	9½	10½	11½	3 7	4 4
40 feet	10	11	1 00	3 7	4 6
50 feet	10½	11½	1 00½	3 8	... ...
60 feet	11	11½	1 00½	3 9	... ...

Ordinary curves are those which are to a given radius one way of the glass only, and of slight depth, and which apply to the whole length or width of the plate and not to one part only.

An extra 10 per cent. will be charged on all bent glass when the manufacturer takes the risk of delivery.

All fractional parts of inches will be charged as full inches. Irregular-shaped plates will be charged as the squares required to cut them from; and for all difficult shapes a charge will be made for the risk in cutting.

Risk of breakage, damage, and expense of carriage to be borne by the purchaser. Packing cases, blind frames, and flannel will be charged: but packing cases will be allowed for, if returned within one ——— in good condition and free of expense.

Payment to be made in approved bills at 4 months' date from the first day of the month following that of delivery, but no more than 1½ per cent. will be allowed if paid in the second month after delivery, and no discount whatever after the close of the second month.

Grinding, one side, 9*d.* per foot; both sides, 1*s.* 6*d.* per foot, for all sizes and thicknesses.

Rough glass, ground on one or both sides, will be charged as the thickness before grinding. Thus, glass ordered one-fourth inch, ground on one side, will be charged as three-eighths inch rough glass, and the charge for the grinding in addition.

Charge for bending polished and rough plate-glass, not over one-half inch thick, to ordinary curves.

Description.	Per superficial foot s. d.
In plates containing under 6 feet superficial	1 6
In plates containing under 9 feet superficial	1 9
In plates containing under 12 feet superficial	2 0
In plates containing under 15 feet superficial	2 3
In plates containing under 20 feet superficial	2 6
In plates containing under 30 feet superficial	2 9
In plates containing under 40 feet superficial	3 0
In plates containing under 60 feet superficial	3 3

Rough glass, 3*d.* per foot ——— than the above. Special prices will be given for larger plates, or plates to difficult curves.

Larger plates or plates exceeding 160 inches long or 96 inches wide at higher prices.

The usual thickness of polished glass is about one-fourth inch; but if required of special thicknesses, the following prices will be charged additional.

	Per foot.
Selected ⅛ inch, or ⅛ inch bare	3*d*
Selected $\frac{3}{16}$ inch	6*d*.
Selected ⅜ inch	4*d*.

Grinding edges of glass not above three-eighths inch thick, one farthing per lineal inch; above three-eighths inch thick, at special prices.

Polished edges, not above three-eighths inch thick, three halfpence (three cents) per lineal inch net; above three-eighths inch thick, at special prices.

The charge for repolishing glass is 1*s*. per foot for each side polished, and all glass sent to the works to be repolished will be at owner's risk and expense.

The question of packages is a complicated one. A large dealer in Bohemian and French goods says that packages are usually free. German boxes, containing one gross of chimneys or four dozen globes, cost 4*s*., and are not returnable. English polished plate cases cost 12*s*. 6*d*. each. English crates holding 400 tumblers cost 2*s*. 6*d*., and are returnable. The general custom of the trade is to charge for packages and have the money refunded when packages are returned, carriage paid.

5th. The freight from Antwerp or Hamburg is 10*s*. per ton. Insurance, 2*s*. 6*d*. per cent.; but most home and foreign goods are delivered free.

6th. Terms of payment seem to vary with every branch of the glass trade. In the foreign sheet-glass trade they are 60 days' bill. English accounts in some instances are 30 days, less 2½ per cent, or 4 months' bill. One large dealer in pressed, cut, and ornamental ware says, "English terms of payment, every six months."

7th and 8th. It is superfluous to say that there is no duty imposed in England on glassware. The landing and port dues of Newcastle-on-Tyne are 1*s*. 6*d*. per ton. No discrimination is made against articles manufactured in the United States, as compared with the goods of other countries.

In brief, I would venture to suggest that the best means of increasing the trade of our American manufacturers of glassware on Tyne side would be to ascertain by personal inspection the requirements of the district; manufacture such goods as are in demand, and send capable representatives here to sell from samples.

EVAN D. JONES,
Consul.

UNITED STATES CONSULATE,
Newcastle-upon-Tyne, September 2, 1882.

WINDOW GLASS MANUFACTURE IN ROME.

REPORT BY CONSUL-GENERAL RICHMOND.

In obedience to circular from the Department, dated June 1, 1882, received June 23, 1882, I have the honor to submit such statistics as are obtainable of the manufacture of window glass in the province of Rome.

The details given are gathered from information furnished in this city by Mr. Francesco Fajelli, the owner of the largest establishment of the kind in the province. The works are situated at Poggio, Mirteto, Sabina, about 45 miles distant from Rome, where Mr. Fajelli employs thirty hands in the manufacture of window glass, lamp chimneys, glass cases for clocks, &c. There are a few other manufactories of window glass in the province, but they are much smaller than that of Mr. Fajelli.

The questions forwarded by the Department are not all answered, partly for the reason that the system followed does not correspond to that in the United States, and the report is consequently lacking in many particulars; but so much of the information required as it was possible to elicit will be found in the following tables. To the first series of interrogatories, however, as to the general system of working, &c., no answers whatever could be obtained. To the second series, "prices of labor," I am able to give the following replies:

WAGES.

	Per day.
Blowers (4 employed)	$2 32
Blowers' assistants (12 employed)	48
Flatteners (4 employed)	1 16
Flatteners' assistants (4 employed)	48
Furnace man (2 employed)	2 32
Carpenters and balers (2 employed)	1 93
Cutters (2 employed)	1 93

The above wages are the average received by the men when they perform their daily allotted task, but any falling off in their industry is followed by a corresponding decrease in pay. The size of glass worked makes no difference in the payments. In addition to these wages the workmen have their lodgings on the premises free of cost; their board is at their own expense. As to the cost of materials, the only statistics obtainable are the following:

Material.	Kind used.	Cost at mine per ton of 2,240 pounds.	Cost at factory per ton of 2,240 pounds.
Sand	From Trapani, Sicily	$1 18	$1 37
Lime	Indigenous	0 96	1 16
Sulphate of soda			18 34
Carbonate of soda			36 67

Old glass.—The old glass from the works is used, but no estimate is ever made of its cost.

Fuel.—Wood is the only fuel used; it is taken from the forest near at hand, and costs for 40 cubic feet $1.93.

Boxes are made of the wood of the plane tree, costing per cubic yard 18 cents.

The largest of the window-glass works in this province, it will be seen, is very small, and can supply but few statistics which will be of interest to American manufacturers.

LEWIS RICHMOND,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Rome, July 3, 1882.

VERONA WINDOW GLASS.

REPORT BY VICE-CONSUL BUDD OF A WINDOW-GLASS FACTORY AT SAN GIOVANNI LUPATOTO, NEAR VERONA.

In this glass factory the crucible ovens are abolished and basin ovens substituted.

These ovens contain about 60,000 kilograms of melted glass each, and give perfectly refined stuff for the daily work of 12 hours to 10 master blowers and their assistants. To do the 12-hours' work there are destined to every place 2 masters, who work 6 hours each. The flattenings are done on the Bievet system, heated by gas. In the ovens wood is not used, and in the flattenings coal is not used. The coal preferred is that from Scotland, Wischau, and Woodhill. The best wood is beech. Coke is not used for the melting or for the flattening of the glass. The daily consumption of coal is 108 quintals (one quintal is equal to 220.46 pounds avoirdupois) per oven and the cost is 3.90 lires (75 cents) per quintal. The daily consumption of wood is 28 quintals for 3 flatteners, which suffices for the production of one oven, and the cost is 52 cents per quintal.

The kneading of the glass is done in the following way: Ground quartz (cost, 11 cents per quintal, including grinding), 80 quintals daily; carbonate of soda (cost, $4.82 per quintal), 17 quintals; sulphate of soda (cost, $1.45 per quintal), 9 quintals; lime, cooked and in powder (cost, 48 cents per quintal), 16 quintals daily. The weight of the material employed in a day is therefore 122 quintals, from which are daily made 160 cases of sheets of 10 square inches each; altogether, 1,600 square meters of glass. The selling prices of the cases of 10 square meters is $3.28 each.

The expense for an oven is about $12,738, divided as follows:

	Lires.
Coal	12,636
Wood	2,268
Quartz	1,440
Carbonate of soda	12,750
Sulphate of soda	2,025
Lime	1,200
Masters	9,600
Flatteners	2,400
Cutters	1,440
Packers	360
Assistants	300
Cases	5,760
Hand-workers	5,500
Clay	3,000
Administration	2,000
Iron	1,000
Straw	500
Transportation	500
Sundry expenses	1,500
	66,179=$12,772 54

Therefore the cost price of every case of sheets is 13.75 lire, $2.65.

The master blowers are paid by the piece at the rate of 20 centimes (4 cents) per square meter of glass, measured after it comes out of the

flattener; the flatteners are paid 5 centimes per square inch; the cutters 30 centimes (6 cents) for every case; the packers 120 francs ($23.16) a month; the assistant 100 francs ($19.30) a month. The masters are paid for all the productions at the same rate, except the spoiled ware (refuse) for which they receive nothing.

The melter and his assistants, as well as the blacksmiths, are included in the hand workers. The melter receives 6 lires ($1.16) daily, and his assistants 3 lires (58 cents); the foreman of the blacksmiths, 5 lires (96 cents), and his assistants 3 lires (58 cents).

The usual size of the rollers is of .80 square inches, and every master works about 100 of them daily.

W. H. DE WOLF BUDD,
Vice-Consul.

UNITED STATES CONSULATE,
Venice, July 14, 1882.

FLINT AND LIME GLASS IN VENICE.

REPORT BY VICE-CONSUL BUDD.

Answers to a circular from the Department of State, dated July 31, relating to flint and lime glass manufactures.

Question No. 1. Where is the glassware manufactured that is received at your post?

Answer No. 1. Glass is received at this port from the different manufacturers of Bohemia and France; blown, pressed, or cut-glass sheets alone being received from Belgium.

Question No. 2. What articles of glassware are used, and are they pressed or blown?

Answer No. 2. Every kind of glass is used, either pressed, blown, or cut.

Question No. 3. What is the average cost of glass at the point of manufacture?

Answer No. 3. It is impossible to get at an average cost. They vary from a few cents to $10 or $12 for each piece manufactured.

Question No. 4. What is the cost of packing, and sizes of same?

Answer No. 4. Three or 4 per cent. is the cost of packing, and the cases generally used measure about 30 cubic centimeters each.

Question No. 5. What is the rate of freight and insurance?

Answer No. 5. Freight on export is from 60*s.* to 75*s.* a ton. Insurance about lire 1¼ per cent. from Venice to the United States, and ordinary insurance is about 3 per cent.

Question No. 6. What are the terms of payment?

Answer No. 6. Cash payments, or, if preferred, 25 per cent. down and the balance on delivery of goods.

Question No. 7. Are there any duties, and what are the custom-house and landing expenses?

Answer No. 7. The duties vary; on blown glass, not cut or engraved, 7 lires per quintal; on glass blown, colored, cut, and engraved, 11 lires per quintal; ordinary bottles, 3 lires per 100; bottles of greater capacity than one liter, 3 lires per quintal.

Question No. 8. Are there any laws or regulations discriminating against articles manufactured in the United States?

Answer No. 8. There is no law or regulation against the introduction of any foreign manufacture.

In the circular I find the following: "Please state what you consider the best means of increasing the trade of the United States in such articles of glassware as are used every day?"

I should find it impossible to advance any idea by which trade with the United States could be increased. Venice is decidedly a glass-manufacturing district. Every kind of glass is manufactured on the spot. Heretofore they have confined themselves to fine and fancy glass and cheap bottles, but now two new establishments have been opened where they make everything, and at prices we would find great difficulty in competing with. Labor is very cheap, and rent is almost a secondary consideration.

Respectfully reported by

W. H. DE WOLF BUDD,
Vice-Consul.

UNITED STATES CONSULATE,
Venice, September 15, 1882.

FLINT AND LIME GLASS MANUFACTURE IN HOLLAND.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

In response to the Department circular of July 31, 1882, to which is subjoined a series of questions relating to the manufacture of flint and lime glassware, I have the honor herewith to submit the following, which, if found to be defective in form, may, as to its substance, not be entirely devoid of some merit, I trust.

The glassware received and imported at this port is manufactured in the Netherlands, at Maastricht (province of Limburg, in Belgium), Moravia, France, Alsace, Saxony, Silesia, Westphalia, and England.

The use of glassware of every description is so general in this country that articles in daily use, as well as articles of luxury, may be said to be almost legion, and can therefore not well be all designated, and this refers to both pressed and blown goods. The greater part of all the better, finer, and more costly glassware is imported from Belgium, Bohemia, and France. Pressed glass articles are more particularly in use by the poor classes of the community, in the restaurants, cafés, confectionery stores, and on board ships. Great quantities of it are also coming to this market and subsequently exported or re-exported to the Dutch East India colonies.

Articles for illuminating purposes, such as lamp chimneys and globes, &c., which are imported principally from Bohemia, Moravia, and Silesia, come here by entire car-loads, packed loose in straw, thus saving the expense for cases, barrels, or casks. Finer articles are always received packed in cases, excepting from England, whence they are usually shipped in casks, which manner of shipment is, however, not near so satisfactory to the importer here, as it causes more breakage. From the interior (Maastricht) the goods are generally received here packed in straw, loose, from on board such crafts as navigate the waterways of the interior of this country, and are delivered free of charge.

In what is described to me as "half-crystal" goods, pressed and blown, the local demand, as well as the export trade to the colonies, is to a considerable extent supplied from the glassworks at Maastricht, firm of P.

Regout & Co. This in part may be accounted for by the firm being enabled to transport their goods comparatively free of danger from breakage, and no import duty being payable thereon. Pressed glassware, such as plates, dishes, sugar-bowls, &c., are brought to this market from Belgium, France, Alsace, England, and Maastricht, as also large table-stands (milieux de table), in many forms and shapes, for use in confectionery stores and bar-rooms, &c. Large articles of luxury, such as chandeliers, lusters, milieux de table, &c., are imported here from Bohemia, and so are large quantities of cut and engraved glassware brought from there.

The freight on ordinary goods coming here from Bohemia, Moravia, and Silesia is, according as the goods are bulky or heavy, from 10 to 20 per cent. on the invoice value; on finer goods, cut or engraved, from 5 to 8 per cent., and on the finest goods from 3 to 5 per cent. Goods from Bohemia are frequently brought here in what is represented to me as joint or combination shipments, which means that different manufacturers or exporters there ship their goods together at same time to their different customers or consignees here. Arrangements for this purpose are usually made by "spediteurs" or forwarding agents. French and Belgian manufacturers furnish glassware in certain cases, or when orders are filled for certain quantities, free of freight charges at this port. From the inland (Maastricht) the goods are, as already stated, always delivered free of such charges here, and at some of the other principal places in this country. For the casks in which the goods usually come from England the charge amounts to from 6*s.* to 10*s.* per piece, according to size. From all other countries the goods come packed in cases, the price of which varies according to size. The Belgian manufacturers' charge for emballage (packing) is 4 per cent. on common goods and 2 per cent. on fine goods.

The rate of insurance on shipments from the inland (Maastricht) is one-eighth per cent., and from foreign countries about one-fourth per cent.

The import duty on glassware of every description is 5 per cent. ad valorem on the declared value.

All damages and risks attending the transportation of the goods are assumed by the importer; shippers of same can never be held responsible for any loss by breakage, &c.

The credit usually given is from two to three months in France, and invariably three months in other countries and at Maastricht.

The imports here of glassware from England have greatly fallen off during recent years, and at present consist chiefly of pressed flint goods, and a few articles of cut glass. American glassware of any description is now hardly to be met with in this market or country. A few years ago several sorts of round and oval plates and dishes, and some tumblers, were imported, which, as to color and accuracy of pressing, were found to be superior to similar goods elsewhere manufactured, but could not compete as to price with the English and inland fabricat. Since 1873 prices for all kinds of glassware have been steadily declining, and more especially does this refer to pressed goods.

There are no laws or regulations here discriminating in any way against articles such as under consideration manufactured in the United States, as compared with other countries.

The following is a list of present prices of articles of pressed glassware largely and constantly in use. At the prices therein stated the goods are delivered at this port, free of all charges, by Messrs. Petrus, Regout & Co., of Maastricht, with 12 per cent. discount. Belgian man-

ufacturers furnish the same goods at about the same prices, while the English prices are said to be from 15 to 20 per cent. higher, but the English flint glass is considered a nicer article than the half crystal goods of either Belgian or inland manufacture.

ROUND DISHES.

	Florins, per 100 pieces.
108 millimeter diameter	2.85
155 millimeter diameter	7.50
205 millimeter diameter	12.75
215 millimeter diameter	16.50

OVAL DISHES.

80 millimeter diameter	3.00
85 millimeter diameter	4.00
110 millimeter diameter	5.00
130 millimeter diameter	10.00
155 millimeter diameter	12.75
180 millimeter diameter	17.50

COMPOTIERS.

205 millimeter diameter	25.00
215 millimeter diameter	25.00
220 millimeter diameter	40.00
Honey dishes	15, 20, 22, and 27.00
Sugar basins	15, 20, and 30.00
Butter dishes, round	22.50
Butter dishes, oval	34.00
Cream jugs	6 and 7.50
Salt dishes	3, 4, 5, 6, and 7.00
Claret glasses	8.50
Sherry and port glasses	6.50
Bitter glasses	5.50
Liqueur glasses	4.50
Champagne glasses	11.00
1 pnt tumblers	8.50
⅘ pnt tumblers	7.50
½ pint tumblers	6.50
⅜ pint tumblers	5.75
⅓ pint tumblers	4.75
¼ pint tumblers	4.50
⅕ pint tumblers	3.50
⅙ pint tumblers	3.00
⅛ pint tumblers	2.50
1/12 pint tumblers	2.50
Custard glasses	7.00
Goblets	7.50 and 9.00
Finger basins	14.00
Celery vases	14.00

Franco-Amsterdam, with 2 per cent. discount.

To establish a trade here in pressed glassware of American manufacture would appear to me to be a difficult task, and chiefly on account of the imperative necessity to compete, as to the price of the goods, against inland and foreign manufacture. To a certain extent this obstacle may, perhaps, be overcome, by the production of original, new, and handsome patterns or styles of goods. Nothing, in my opinion, can, however, be achieved in the way of creating a demand and consequent market in this country for American glassware unless importers and dealers here can first be made to feel satisfied of the intent and ability of our manufacturers to furnish their goods regularly and permanently.

The internal condition and trade of England, France, Belgium, Germany, and Switzerland, &c., seems never to be allowed to interfere with

or temporarily interrupt their foreign trade, whereas this cannot be said of our country. To establish a foreign trade in articles of American manufacture and then fill orders promptly during, say, about two years out of five, or so, is a practice which cannot be made to prevail, and unfortunately it is imputed to our people, with how much justice I am not prepared to say, whilst I am well aware the imputation is not altogether groundless.

In this connection I would again refer to the forthcoming international exhibition at Amsterdam, as presenting an excellent opportunity to test whether the introduction and sale of American glassware into the Netherlands and its colonies is promising or otherwise, by our manufacturers bringing and exhibiting here a full assortment of such articles as they may have reasons to believe to be suitable for the wants of the country, and which they can furnish at such prices and in all respects on such terms as required by the trade.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, September 5, 1882.

GLASS INDUSTRY OF THE NETHERLANDS.

REPORT BY CONSUL WINTER, OF ROTTERDAM.

In compliance with instructions received from the Department of State, I have the honor to make the following report on the glass industry of the Netherlands.

In reply to a series of questions transmitted with the circular of June 1, 1882, I beg to state that there are no manufactories of window glass in the Netherlands. As there are, however, several manufactories of glass bottles, I have to report the following:

MANUFACTORIES OF GLASS BOTTLES.

They are found in the following places: In the province of South Holland: Leerdam, 3; Irryndrecht, 2; Capelle, 2; Delfshaven, 1; Niemverkerk, 1; Delft, 1; Kralingen, 1; Schiedam, 1. In the province of North Holland: Amsterdam, 2. In the province of Utrecht: Loenen, 2. In the province of Gelderland: Culemborg, 1; Vuren, 1.

All these manufactories except two have 6 pots, employ from 40 to 50 laborers, and produce annually about 1,000,000 bottles.

The two manufactories excepted are, one in Culemborg, with 8 pots, 65 laborers, and an annual production of about 1,200,000 bottles, and one in Schiedam, with 10 pots, 75 laborers, and an annual production of 1,500,000 bottles.

FURNACES.

Every manufacturer has the following furnaces: 1 glass furnace in which the material is melted to glass; 2 furnaces where the material is burned before it is melted in the glass furnace; 2 furnaces where the pots are warmed before being brought in the glass furnace; 6 furnaces where the bottles are cooled. All those furnaces are built of Benthelmer sandstone and refractair stone.

POTS.

The number of pots in the glass furnace is generally 6. Every pot furnishes daily about 1,300 pounds of glass, the value of which is estimated at $16; so that every manufacturer makes about $575 worth of bottles every week. Every pot is attended to by 3 men, viz, the blower and his 2 assistants. It may further be observed that every manufacturer makes the number of pots which he wants for his own use; they are made of pipe-clay, which is found in Germany, and last about one month.

LABORERS AND WAGES.

The total number of laborers employed varies from 40 to 50. As stated above, every pot is attended to by 3 men, the blower and his 2 assistants. The wages of those 3 together are from 30 cents to 56 cents per 102 bottles, according to the sizes of the bottles manufactured. They make about $20 a week, which is divided as follows: For the blower $14, and for his two assistants, respectively, $4 and $2. The wages of the other laborers vary from $2.40 to $4.80 per week.

MATERIAL.

The material from which the glass is melted is composed of river sand, sulphate or carbonate of soda, old glass, and certain ashes, which are obtained from Goes and Zierikzee, two cities in the province of Zeeland.

BOTTLES.

The total number of bottles manufactured every year amounts to about 19,000,000. They are made in black, yellow, green, and brown colors. The greatest part of those are square bottles, which are used for the export of gin, though some manufacturers also make wine and other bottles.

COALS.

Coals, which are imported from Germany, are used every year in each manufactory to an amount of about 1,700 tons. The price is about $3 per ton. Wood and coke are not used in such quantities to be mentioned separately.

OTHER GLASSWARE.

In reply to the second circular from the Department of State, dated July 31, 1882, I have to report the following:

To answer the question, "Where is the glassware manufactured that is consumed in the Netherlands?" I must state that there is only one manufactory of glassware in the Netherlands, viz, at Maastricht, province of Limburg, and with the exception of what is placed upon the market by this firm the glassware is chiefly imported from Belgium and Germany.

In reply to the question, "Which articles are manufactured?" and "What the cost of each article is?" I forward to the Department, together with this report, the catalogue and price-list of the glassware that is made at the above-named manufactory, which books have been sent to me by the proprietor.

The only discrimination for foreign manufacturers importing glass

ware in the Netherlands is an import duty of 5 per cent. ad valorem on all glassware, except broken glass, which is free.

To give a general idea of the glass industry of the Netherlands I have prepared the following statements, compiled from the official statistics published by the minister of finance. They show the value of the special import and export of all kinds of glassware for the year 1880, which are the latest statistics obtainable.

SPECIAL IMPORT.

From—	Window glass.	Looking glass.	Bottles.	Other glassware.	Broken glass.	Total
Belgium	$236,154	$95,598	$4,302	$74,122	$4,200	$414,[illegible]
Dutch Guiana						
Dutch East Indies				85		[illegible]5
France	20		8	212		[illegible]
Germany	4,255	41,704	84,837	194,652	16	275,464
Great Britain	9,704	18,820	137	13,601	37,105	79,367
Norway						
Straits Settlements						
Other countries				174		174
Total	249,533	156,122	39,254	252,846	41,321	769,[illegible]

SPECIAL EXPORT.

To—	Window glass.	Looking glass.	Bottles.	Other glassware.	Broken glass.	Total
Belgium	$254	$1,409	$21,409	$433,440	$216	$456,[illegible]
Dutch Guiana	250		152	19,629		[illegible]
Dutch East Indies	3,253	208	26,106	362,648	82	392,297
France			230	60	6,784	7,074
Germany	1,580		6,117	9,174	4,646	21,517
Great Britain	146		978	254,587	3,963	259,674
Norway	214		17	6,016		6,247
Straits Settlements	140			20,740		20,880
Other countries			1,089	4,413		5,502
Total	5,887	1,617	56,098	1,110,707	15,691	1,190,[illegible]

The foregoing report has been made up with the assistance of several manufacturers, who, on my request for information, have given me the different facts above reported; which information I trust will be of interest to American manufacturers.

JNO. F. WINTER,
Consul.

UNITED STATES CONSULATE,
Rotterdam, October 21, 1882.

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FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

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ON

COMMERCE, MANUFACTURES, ETC.

APRIL, 1883.

DIRECT TRADE BETWEEN THE UNITED STATES AND IRELAND.

REPORT BY CONSUL PIATT, OF CORK.

In connection with the approaching exhibition at Cork, referred to in my dispatches 29 and 31, dated, respectively, 16th and 29th January, 1883, the subject of the state of trade between our country and Ireland, with the possibility of improving the same, suggests itself.

There seems little that is new to be said on the subject, but there may be some virtue in repetition. It is hardly necessary to repeat that there is in Ireland a large demand for American productions and manufactures—bacon, flour, corn meal, canned meats and fruits, labor-saving machinery and implements of various kinds, with many other articles—and a large supply of these are brought here every year, but at great disadvantage. The chief drawback is the indirect way in which our products and manufactures reach the Irish market; that is, only or almost entirely through ports of England and Scotland, whence they are reshipped to this country, with the more than doubled tax for transportation, commissions for repeated handling, and other charges, which, increasing the prices of these articles in Ireland, renders competition with foreign goods of the same description more difficult than it would otherwise be. Respecting this matter, I have the honor to inclose copy of a letter which I have received from an intelligent, enterprising, and public-spirited merchant of Cork, who has taken much interest in it, and who in this letter treats of the subject at some length, clearly and fully stating the facts touched upon above—the burdens under which the trade between the United States and Ireland labors—and suggesting a possible (I wish it could be said probable) means of effecting a desirable change.

If such a line of steamers as he mentions is out of the question now, it seems difficult to say why an an occasional vessel of some description might not be profitably freighted in the United States with such American articles as find a constant market in Ireland, and sent directly to this nearest port of Europe, where her cargo might readily, I should think, be disposed of, and some return freight secured. Immense quantities of American bacon and pork are used in Ireland; these, with flour and corn meal, of which also large quantities are used (but all

come through ports of England and Scotland), would by themselves make an occasional profitable cargo.

JOHN J. PIATT,
Consul.

UNITED STATES CONSULATE,
Cork (Queenstown), February 20, 1883.

HOW TO INCREASE AMERICAN-IRISH TRADE.

Mr. William J. Lane to Consul Piatt.

7 NORTH MALL,
Cork, February 15, 1883.

DEAR SIR: Having been present at the meeting of the executive committee of the Cork exhibition when you were requested to bring our exhibition to the notice of the New York Chamber of Commerce, and also when your note promising to do so was read, I am prompted to address you officially in reference to the subject of commerce between this country and the United States. I have for many years taken a deep interest in American institutions, and particularly in the manufacturing and commercial development of your country. I have noted with regret the comparison between its progress in this direction and our own backwardness in Ireland. The causes of both it is needless for me to enter upon for my purpose in this letter. I have constantly seen the reports of your brother consuls in almost every country in the world, indicating in what manner American trading interests might be best forwarded in their localities, and have in many cases seen subsequent reports of the successes attending the adoption of the suggestions made in these reports. I have only once seen a similar report by a consul of the United States in Ireland; that was one made by your immediate predecessor in office. It was certainly a very lucid and practical one, and I am very much surprised not to have noted any results as yet from it in the way of attempts to open *direct trade* between this country and the United States. I doubt if any such attempt could have been made without my knowledge, though it is possible there may have been.

I therefore would ask you to make another effort to call the attention of your manufacturers, merchants, and ship-owners to the vast field there is in this country for *direct trading* from America. A man generally has an object in most acts of his life, and as this object is commonly looked for, if it be not avowed, I think it well to state here that my principal object in wishing to see American trade with Ireland highly developed is that I hope thereby to see Ireland's trade with America reciprocally benefited. In fact, I know that the advantage would be all on the Irish side, as the field of commerce thus opened to us would be comparatively much greater than that of Ireland would be to the United States. Having thus discovered to you my motive, permit me now to point out what I consider are the inducements to American shippers in direct trading with Ireland.

In the first place, we have a population of over five millions to be catered for in almost all the necessaries of life. In the next place, we have, as you know, few or no manufactures of our own, though we are trying to remedy this want just now, but it will take many years for us to become self-supplying. Then, in round numbers, it is estimated that we import £20,000,000 (or about $100,000,000) worth of manufactured articles every year, chiefly from England. A large amount of American products find their way through the same channel to Ireland. In the way of canned meats, fish, and fruit; in green fruit, bacon, pork, beef, and other food products; in hides, skins, bark, cotton, and other raw materials used in manufactures, Ireland is a large consumer of American produce. But every single item of the above list comes to Ireland *not direct*, but through English ports and English brokers. This system of America trading with Ireland only through English ports and through English brokers is an anomaly, an anachronism, and a direct impediment to the development of a healthy commerce between the two countries. To prove this, all goods of American production which are ultimately consumed in Ireland either enter or pass by some Irish port on their way to an English port. At least three days are lost in transit—one day in reaching England after leaving the Irish port of call; one day in being discharged (if they happen even to be on top of cargo, which is unlikely) and transshipped on a cross-channel steamer for Ireland; and a third day in transit back again to Ireland. This is supposing the goods were invoiced and consigned to an Irish merchant, and that all possible dispatch were used, which seldom is the case. In the same way time is lost by an Irish shipper having at present to send his goods to an English port for shipment to America. It may be taken

for granted that a week is always lost by this system of English ports being used as the landing piers for traffic for Irish merchants. In addition to the loss in time, the freight to England is necessarily heavier than it would be if an Irish port were the destination of a steamer, as one day saved out of eight would make a vast difference in the expenses of a voyage. Then, before the goods reach the Irish merchant, there are added the port dues in Liverpool, expenses of discharging from American and transshipping on an Irish steamship, the freight back to Ireland, which in many cases equals if it does not exceed the freight from America to England, and, finally, the commission of the English broker through whose hands they pass at the port of discharge, and that of his agent in Ireland who distributes them on arrival. There is also a second insurance premium to be paid on the shorter voyage. I do not include the port dues or discharging at the Irish ports, as these would be paid if the goods were landed here at first call. I have no hesitation in saying that this accumulation of *unnecessary expenses* adds at least 10 per cent. to the cost of the goods beyond what it would have been had they been shipped direct to Ireland from America. This handicaps your commerce most unfairly, in competition with the products and manufactures of other countries, in the Irish markets, and it also takes 10 per cent. out of the pockets of the Irish consumers. Under such disadvantages it is simply impossible to develop trade between the two countries.

In former times the system of English customs at Irish ports prevented a change in this direction. This obstacle no longer bars the way. The remedy lies in a direct line of steamers between America and some Irish port. Queenstown, for many reasons, presents the most advantages. Even at present, by a little activity on the part of American shippers in opening direct commercial communication in Ireland, there is sufficient trade between the United States and Ireland to support such a line of steamers with bimonthly sailings. The difficulty, I know, is in a return freight. One thing is certain; that is, that a large passenger traffic on the return voyage would be secured, and a little concession in freights in combination with some cross-channel line would induce sufficient cargo to prevent loss on the return voyage. The steamship line might not at first be a paying speculation in itself, but it should be viewed as part of the effort necessary to develop trade between the two countries, and as its facilities would enable the shipper to place his goods on the markets at some 10 per cent. less than now, he could afford to pay an extra freight by this route. The time gained would also be important in the shipper's calculation as against extra freight. In the course of a few years I should hope that Ireland might be able to supply a good outward cargo; and the possibility of such a line of steamships securing a contract from your Government for the carriage of the mails ought not to be overlooked. To make such a line of steamers succeed, all your shippers should unite in forwarding goods intended for Ireland by it, instead of shipping them piecemeal by the different existing companies. The reasons why only an American company could be expected to work this line of boats are too obvious to need explanation by me.

I think I have written enough to put the situation clearly before you. I have for the past three years endeavored to bring it under the notice of American merchants in various trade journals in the United States, but it wants to be taken up officially. The exhibitions in Boston and Cork this year present favorable opportunities for merchants of both countries making each other's acquaintance and seeing where openings for trade offer themselves.

I am, dear sir, yours, faithfully,

WILLIAM J. LANE.

J. J. PIATT, Esq.,
United States Consul, Queenstown.

THE EUROPEAN FIELD FOR AMERICAN COMMERCE.

REPORT BY CONSUL POTTER, OF CREFELD, ON THE COMMERCIAL FUTURE OF THE UNITED STATES AND THE OVERPOPULATION AND NECESSITIES OF EUROPE.

With a view of enabling those interested in the extension of American commerce and the development of the yet unmeasured industrial capacities of the United States, I have prepared a table, appended to this report, which exhibits the prices prevailing on or about the 1st of January, 1883, in some of the principal trade centers on the continent of Europe, of a very few of the staple articles of food and agricultural productions which can be most easily cultivated and exported from the

United States. The table enumerates such articles of necessity only as are likely to find an active market and rapidly increasing demand. The rate of import duties collected upon such articles in Europe is also shown.

The information and data contained in the table were, by request, furnished to this consulate by the courteous officials managing some of the various chambers of commerce established in the different cities named.

When this table reaches the public eye it will have no especial value to the export merchant as data to guide him in the selection of articles for export, but it will perhaps enable him, and those who represent the public welfare, to make comparisons which will suggest a field for future active operations that may not only benefit the enterprising American exporter, but which may also benefit the entire people of both continents by expanding the commerce and business of one, while it supplies, at reasonable rates, an abundance of the necessaries of life to the other.

I have also attached to this report a map, showing the railroad and steamboat routes, and the principal ports of entry in Western Europe which can be conveniently reached by American steamships in from eight to fifteen days. That part of the map inclosed in a band of red lines shows the United Kingdom and a belt of the Continent, every part of which can be readily reached over established lines of railroads within eight hours from ports of entry accessible to the largest class of steamships.*

FOOD SUPPLY OF EUROPE.

From data and careful estimates the population of England and this belt of the Continent, which is but eight hours wide, is about 102,000,000, or twice that of the United States. The territorial area containing this dense population is about 400,000 square miles, or considerably less than that of the States of California and Texas. This district has been designated upon the map for the purpose of showing that, with suitable preparations at ports of entry, the vast surplus population contained in it could be conveniently supplied with a great variety of perishable supplies, including imported fresh meats slaughtered and put on board in America. There are, of course, other overpopulated portions of the Continent not less dependent for a food supply. Indeed, the average annual production of the last decade of years exhibits the fact, which cannot be longer questioned, that from her own resources Europe is no longer able to feed her population, and the annual deficit in food products is rapidly and steadily increasing. Science, under the guidance of able and practical minds, has reached the limit of its power in forcing from the soil, the sea, and the stream their utmost yield in behalf of human necessities. The overworked farm-lands must every year be recuperated with fertilizers, and the material needed for this purpose is scarce, and now so expensive that the peasant farmer, after a hard year's work, finds it difficult to gather from the soil a new dollar for the old one he has planted in it. While the population of England and the Continent, with the exception of France, is increasing at the rate of about 1½ per cent. annually, there is no increase of arable acres. The capacity for producing food has, therefore, reached its limits in most

*The continental area marked upon the map by Consul Potter is embraced within a line commencing at Bayonne, on the Bay of Biscay, and running along the Spanish frontier to Perpignan; thence direct to Clermont and Bourges; thence by Auxerre to the German frontier, near Metz; thence to Landau, Frankfort-on-the-Main, and Leipsic, striking the Baltic Sea at Colberg; viz, about one-half of Germany, all Holland and Belgium, three-fourths of France, together with the British Isles.

of the European states. In fact, as a means of modifying the dangers arising from floods and hail, it is said to be in contemplation to absorb into forest growth a portion of the soil now devoted to the production of food.

The grain crop of Europe for the year 1883, it is estimated, will fall short of the demand for home consumption by more than 350,000,000 bushels. Next year the surplus population will be some millions greater, and the deficiency in grain products will be correspondingly augmented, and thus will the difference between consumption and demand continue to rapidly widen as the years roll on. So far as food-supply is concerned, the people in the thickly populated area of Europe appear to be "living from hand to mouth;" and in each year, before the beginning of a new harvest, it is not probable that there is in the country a supply of breadstuffs which would meet the demands for home consumption for a period of thirty days. The deficiency in the meat supply can be measured by that of breadstuffs and grain. Any disturbance of the elements, therefore, which produces a season of unusual rain, cold, or heat, and which reduces the crops below an average yield, is now justly a source of anxiety, if not of alarm, to European statesmen, who measure the future by the lessons of the past and the standard facts of the present day. When viewed with a prospect of possible war between European states they assume a still more serious aspect, and I have reason to believe that the reports of the able boards of commerce in some parts of the continent have presented facts and figures and drawn conclusions therefrom which the highest governmental authorities have not deemed as proper information to be laid before the public. Some of these commercial organizations have been actually suppressed because insisting upon their privilege of reporting and publishing facts and conclusions drawn therefrom.

If, according to estimates, the grain crop of the present year falls 350,000,000 bushels below the annual consumption, with a corresponding deficiency in the meat supply, what is likely to be the rate of increase in future demands from foreign sources, and where is the supply to come from?

Hungary and Russia are the main sources of continental grain supply. When a favorable season gives Hungary a surplus, it finds a ready market among her near neighbors, who receive it by means, mostly, of inland transportation. The cost of freights from Russian ports to England, France, and Belgium, Holland and parts of Germany, is quite as high as that direct from the United States. In this respect Russia possesses no advantage over other sources of foreign supply, while her system of agriculture is so far inferior to that of the United States as to be hardly worthy of comparison. The unfettered mind of American inventors and mechanics has furnished appliances for cultivating the soil and gathering its products so far in advance of those of Russia, or of any other country that can produce food in excess of home consumption, as to place the question of competition with the United States in agricultural productions outside the pale of consideration. And when the facilities of transportation from the great food-producing districts of the United States to tidewater are considered, the difference in the cost of ocean transportation between America and Russian ports to the densely populated districts of Western Europe would be in favor of the American exporters. The marshaling of these facts in one's mind, followed by a little thought, will soon force the conclusion that the redundant population of Europe must rely upon the United States for its future enormous demands for the necessities of life.

The different articles of this class now imported from the United States are numerous, but, with the exception of grain, breadstuffs, and meat, the quantities are not very large. The list is likely, however, very soon to embrace items from all the agricultural productions of the country, and to breadstuffs and all kinds of grain and meat will be added staple vegetables; fruits, fresh and preserved; dairy products: fish, fresh and cured; condensed food for cattle; also every variety of raw material for clothing and for manufacturing purposes, besides cotton, such as wool and other fibrous substances; hides, leather, and all kinds of oils; prepared paints, paint materials and varnishes; spirits; many of the finer metals used in the arts; and the near future is almost certain to add two other most important items of export, viz. sugar and wine.

BEET SUGAR AND WINE.

Much of the soil in Germany and France now devoted to the culture of the sugar-beet will soon be required for the production of articles of food which will go farthest in supplying the actual necessaries of life, and the production of sugar from beet roots will probably be transferred to that belt of country, so admirably adapted to this culture, in the United States, lying between the 40th and 44th parallels of latitude.

The heydays of the vintager in Germany and France are also surely passing away. Climatic changes and the exhaustion of certain elements in the soil, vital to the health of the wine, have already reduced the wine yield of those countries to such an extent that they are obliged, even at this date, to import from other countries a considerable part of the supply needed to meet the demands for home consumption. The decrease in the production of wine in France has, notwithstanding the great efforts made to prevent it, been steadily going on for more than thirty years, and the average yield in the last ten years has been less than half that of the decade preceding 1860. The production of the vineyards in Germany is not much better. The causes which lie at the foundation of the disasters to the principal and most profitable crops of these countries cannot, I think, be regarded as temporary. The uncertainties of the grape crop, and the efforts to preserve it, began more than half a century ago. There are localities in the United States where the peach and plumb tree, thirty years ago, could be relied upon to produce beautiful and bountiful annual crops, but where such trees are now nearly extinct. Great efforts were made to doctor and save these popular fruit trees, and an occasional lucky combination of sunshine and shower, of heat and cold, would revive the hopes of the cultivator by bringing back to his sickly trees a few specimens of his treasured fruit. But, under the influence of climatic changes and chemical combinations in the great laboratory of nature, his hopes and his trees gradually disappeared. Similar changes are now, without doubt, affecting the vineyards of France and Germany. The picturesque slopes and river sides of these countries, where other crops are not possible, will still be cultivated, and the patient and hopeful vintager will continue his struggles with many failures, and be rewarded with an occasional indifferently successful crop. But, with the advantage of location and the freshness of American soil, and with improved methods for the manufacture and preservation of wine, recently discovered, California and other extensive districts in the United States equally favorable for the cultivation of the grape are likely to become the chief source of wine supply for export suited to European tastes and wants.

LOW WAGES AND DEAR FOOD.

The facts exhibited in the table previously referred to show that the prices of the staple necessities of life in Europe are higher than those prevailing for similar articles in the United States, while the average rate of wages paid the laboring classes on the continent is, with the exception, perhaps, of a few skilled workmen, from one to four hundred per centum less than those prevailing in America. The steady increase in the price of food for the past ten years, while wages, if not declining, are tottering on the brink of a fall, is a sufficient indication that the food-producing capacity of Europe has been strained to its utmost, and still falls far short of meeting the demands for home consumption. And now the necessity for having a source of supply that will be certain, with adequate arrangements for its economical and rapid delivery, are questions which are being earnestly pressed upon the consideration of the Governments immediately interested.

Efforts with some politics in them will be made, and are being made, to put a rosy tint upon unpleasant facts. Agricultural interests are being especially favored, and enticing inducements are presented to encourage farmers to increase their crops, while, notwithstanding the high prices of meats and the paucity of production, when measured by the magnitude of the demand, they are protected from foreign competition by import duties levied on food supplies. The aid of science is much talked of and will be still further invoked, with a view of drawing from the earth more abundant yields. But until farmers and tillers of the soil shall become practical scientists, hopes built upon such a foundation will prove as unsubstantial as the fabric of a dream; and, however unpleasant the facts may be, it is clear that Europe must rely wholly upon foreign sources for food to supply the millions that will be hereafter annually added to her population.

The magnitude of the demand of the continental states, in the very near future, may be measured not only by the natural increase of their population, but also by the rapid growth of the wants of England, whose imports from her own colonies, and from the United States, has reached such enormous proportions. For the reason that the working classes on the continent receive less wages and have greater burdens to bear in the way of taxation than those of England, the supposition that the continental authorities would desire to secure a food supply as cheaply as possible seems natural.

PROTECTION AND PROHIBITION.

German import duties upon food-products are not only permitted to stand, but American meats of all kinds are cried down, and the importation of hog products prohibited* in some states and threatened with prohibition in others. This pleases the farmers, while the workingmen's societies of Westphalia and Rheinish Prussia, and other districts, protest vigorously, but in vain, against such legislation, and declare that the prohibition of American pork will be severely felt by the working classes, whose earnings are too small to permit them to purchase other meat, and that American pork only is possible to them.

This new prohibitory law seems exceptional in its provisions, because it applies alone to imports of this article from America. Without some

*The new Imperial prohibitory law against the importation of American pork has not yet (March 8th), been promulgated.

pressing necessity the prodigious and growing budgets of the larger continental governments will cause them to hesitate long before making any changes in their revenue laws that will weaken the national income. But the day cannot be distant when all restraints, except those, perhaps, of inspection, will be removed from the importation of food-products and other actual necessaries of life. Perhaps that day could, with advantage to the American and continental governments, be hastened by efforts to secure reciprocal commercial legislation. As Europe has no more room for tillers of the soil, she must find employment for her redundant population in manufactures, and for these she must have a market. The necessity with her is imperative. She must have food beyond her capacity for production, and she must sell her manufactures to pay for it. The United States have no such necessities to contend with. They can produce a grand surplus of food, and manufacture everything their people need. There are certain elements in the commercial outlook of the two continents which seem, therefore, to indicate that the present is an opportune period for the initiation of legislation, by treaties or otherwise, which might result in mutual advantage to the people of both continents. Some of the progressive statesmen of Germany have expressed surprise that a proposition should be entertained in the American Congress to reduce the duties on silk and other textile stuffs; on iron, steel, and leather goods, without requiring some reciprocal legislation on the part of Germany, which would remove existing restrictions—some of them very absurd—upon food products. There are, too, many patriotic and able citizens who fairly represent the popular sentiment of Germany that would be glad to know that the United States had initiated a step that would eventuate in the removal of all restrictions upon the importation of food-supplies into their country.

The power to secure a modification of continental legislation, which interposes revenue-tax barriers between American agricultural productions and the wants of the people of Europe, would seem to rest with the Government of the United States. Why should the duties on European manufactures be reduced, and the doors opened still wider to the admission of the products of her cheap labor, unless an equivalent, when such is possible, in behalf of American interests is secured by the removal of import taxes upon agricultural productions? The textile and iron and steel industries of Prussia and the manufacturers of knit goods in Saxony are not independent of American markets. As an illustration, it may be stated that Crefeld, which is one of the principal centers in Germany for the manufacture of silk and silk and cotton mixed goods, during the year 1882 produced goods of this description to the value of about $20,000,000. More than one-quarter of the total manufactures of this single town of 80,000 inhabitants was sent to the United States. These goods, after paying freight over land and sea, and 60 per cent. duties, gave the manufacturers a satisfactory profit. The total number of operatives, in all departments, employed in manufacturing these goods was 65,000, and the total wages paid them was $6,052,676, or to each operative for the year, $93.11, or less than $2 per week.

Suppose, in view of the restrictive and prohibitory legislation against American meats by Germany and France, the United States should raise the tariff on silk goods to 100 per cent., and thus probably reduce by 25 per cent. the demand for the manufactures of this locality, and at the same time reduce by 25 per cent. the meager earnings of the 65,000 operatives, whose endurance is already strained! The effect upon

that community would be a disaster worse than that from flood or fire, because it would be permanent. The power which the legislative department of the United States has over the situation seems, therefore, manifest, for it is not probable that the German Government would permit its industrial classes to be further oppressed rather than open its ports to the free importation of food supplies to meet a deficiency which their overworked and overpopulated farm-lands cannot supply. Employment for this surplus population must be found, for idleness among masses of people means anarchy, and Europe, which is strong in soldiers and in the science of government, will prevent that by encouraging manufactures. They will send their surplus population into workshops and factories and into the mines, and whatever human hands can create to meet the wants of mankind will here be produced. Labor in Europe is likely to be cheaper than ever, and therefore in the future the United States can hardly look to Europe for any very large market for their manufactures, other than those which are temporarily protected by patent laws. The free and active minds of the American mechanics will invent, and Europe will imitate their practical productions, and, if allowed, send their inferior copy, with an inferior price, over land and sea, and compete for a market on the native soil of the originator.

Under liberal but prudent national and state legislation which will encourage the development of agricultural industries, especially of cattle raising, and which will secure unobstructed channels to popular markets, there will be substantially no limit to the extent to which the commerce of the United States can be increased. The geographical position of the country, and the advanced status already obtained in means and methods of rapid and cheap communication, its unmeasured capacity for production, the enterprise of its people, and their mastery of the practical sciences, leaves them substantially without competition in supplying the markets of Europe with agricultural and food products.

FOOD PRODUCTION AND CONSUMPTION IN EUROPE.

A glance at the map accompanying this report,* and at the following figures, will enable any one interested in the subject to form an opinion regarding the magnitude of the probable future demands of European markets. The acessibility and compactness of this field for American enterprise will also be noticed. The increase in the demand will be, of course, in proportion to the increase of population. The present population of ten only (including the four smallest) of the European states, namely, England, Belgium, Holland, Germany, France, Switzerland, Austria, Italy, Spain, and Portugal, is about 225,000,000. The territorial area of these countries is considerably less than one-third of that of the United States. Taken together, the grain crop of these states, as stated in 1882, fell more than 300,000,000 of bushels below their annual consumption. What, then, is likely to be their deficiency in ten and twenty years from this date?

The annual average increase in their population (France excepted) is about 1½ per cent., or 16 per cent. in ten years. In the United States the increase was 30 per cent. in ten years. The compound increase in overpopulation in the ten states named will be, therefore, about 3,375,000 annually, or 36,000,000 in ten years. Some idea of the amount of supplies needed ten years hence to support that number of people

* See foot-note at page 456.

may be formed by taking only two items of food, bread and meat, and allow for consumption to each person the same rations that are measured out, with scrupulous economy, to each soldier in European armies, viz 20 ounces of bread and 8 ounces of meat, daily. The result will be as follows:

The daily consumption of bread would be ..... tons..	20,0[illegible]
The yearly consumption of bread would be ..... do...	7,332,4[illegible]
The number of bushels of wheat required, at 4 bushels for 1 barrel of flour, to make this bread would be ..... bushels..	335,199,11[illegible]
If in flour, the number of barrels required would be, yearly .... barrels..	83,799,77[illegible]
Assuming the meat supply to be all beef, the daily consumption would be ..... tons..	8,0[illegible]
The yearly consumption would be ..... do...	2,932,77[illegible]
The number of cattle required to furnish this amount of beef, assuming each to weigh on foot 1,000 pounds, and one-half of this weight to be merchantable fresh meat, would be (yearly) ..... cattle..	13,138,52[illegible]
The united weight of bread and slaughtered meat to be imported in one year would be ..... tons..	10,265,26[illegible]
The number of ships, at 1,000 tons each, necessary to transport this amount of food would be ..... ships..	10,26[illegible]

This estimate applies to the demand for food needed to supply the future increase only of over-population. It does not embrace the over-population of the present day. To measure the actual deficit in breadstuffs and meat, which will probably exist at the end of 1892, the amount of the deficiency now reached (over 300,000,000 bushels in breadstuffs alone) should be added, and that would nearly double the above figures.

What would be the tonnage, if all the supplies required and marketable in Europe were included in these estimates, each reader will judge for himself.

It is estimated by those competent to pass judgment upon the subject that Germany does not, even at this date, raise more than half the meat consumed by her people. Live cattle are purchased mostly in the eastern countries, Russia, Poland, Hungary, and Denmark, and are brought by rail and landed in a condition far inferior to those coming from the United States in ships constructed expressly for conveying live cattle and frozen meat.

AMERICAN FRESH MEATS IN EUROPE.

The arrangements made for the reception of frozen meats in England have been so far perfected that entire cargoes from distant Australia can be and are delivered in perfect condition, and kept for an indefinite period, to suit the demands of the market, in insulated compartments on shore constructed for the purpose. But even there, where the experiment has been so successful, this business and the manner of conducting it is still in its infancy. Its development in the future will be very rapid. On the continent the initiatory steps in the frozen meat business have hardly been taken; and yet it is evident that the rate of deficiency in proportion to population in the densely inhabited coast-belt of Western Europe, designated on the map, is quite as large as that of England, and that sources other than those now relied upon for meat supply must be sought to satisfy the enormous and rapidly increasing demand. The railroads in Germany, Holland, Belgium, and France, leading from the great ports of entry which are accessible to largest steamships, are already ample to afford facilities for reaching, inside of eight hours, more than half of their population. With adequate arrangements at ports of entry fresh meats slaughtered and put on board at ports in the United States nearest to the cattle-raising districts could,

in cars prepared for the purpose, be delivered in prime condition every morning to the chief centers in these populous districts. With these facts in mind it can hardly be doubted that the day is not distant when structures suited to the reception of frozen meats will be erected at the principal ports on the continent, from which night trains will run with regularity to interior centers, freighted with fresh meats and other perishable articles imported from America. Stations skirting the coast from which such industries could be conducted are Stettin, Hamburg, Bremen, Amsterdam, Rotterdam, Antwerp, Havre, Bordeaux, La Rochelle, &c.

AMERICAN VS. BRITISH SHIPPING.

What are the American States and their business men doing in view of the opportunities which are presented for the extension of their commerce in this direction, and for the development of the wonderful resources at their command for feeding it? Are they, by suitable national, State, and municipal legislation, laying foundations which will permanently secure for the country the full benefit of the enormous active trade which is possible with the people of Europe?

By and by, instead of four or five steamers per day leaving American ports, twenty, thirty, or fifty will daily clear, laden with supplies for Europe. If the future is only measured by a brief period in the history of the past this conclusion is inevitable. Is this immense carrying-trade to be done mainly in foreign ships as now? Is the best shipbuilding material in the world, so abundant in America, to remain dormant, and the skilled labor and ingenuity of American mechanics to rest in idleness, while the shipyards of England and Germany teem with active industry in constructing vessels which shall control the carrying-trade of America? Are the avenues of employment which a merchant marine would open to American mechanics and sailors to be continued under the control of foreign nations? England, whose territorial area is but a dot on the earth's surface, has, through her commercial policy, encircled the globe with the arms of her power. Through the influence of trade and her maritime commerce she maintains her power and an unbroken peaceful connection with her colonies. It is her encouragement of trade and commerce, conducted in ships built within her own yards, that has made her flag familiar and respected in every corner of the globe. It is through these instrumentalities also that her people are able to carry not only her own enormous debt of more than $5,000,000,000, but a large part of the public and corporate indebtedness of nearly every other civilized nation. From these sources England has become a sort of reservoir, into which, in the form of interest, is pouring, from every part of the globe, a constant stream of the golden earnings of people whose language, interests, and sympathies are strangers to her. The Orient and Occident and the antipodes are alike tributaries to her wealth and power. But little more than a century has passed since England, compared with some other European powers, was poor. From what source has come the power and wealth of this dot on the earth's surface, if not from the steady pursuit of an intelligent maritime and commercial policy?

If commerce and shipbuilding has done so much for this little "iron-bound island," what may it not do, under wise and patriotic legislation, for a prolific and almost boundless continent, controlled by a single government with no jealous antagonistic neighbors to retard the development of its resources or the business thrift of its people?

THE AMERICAN OPPORTUNITY.

When reviewing the condition which Europe, in the march of time, has now reached, it would seem that there were opportunities now presented to the United States to provide for a period of unusual business activity and prosperity that has not been paralleled by any previously existing nationality. Omitting the far-off countries of Australia and New Zealand, the United States embrace the only considerable fertile section of unoccupied territory on the earth's surface which has a range of climate and other conditions for producing food suited to the wants and habits of the Anglo-Saxon and Continental races. These latter have already learned to regard America as the great granary and food-producing section of the world. Even Russian merchants do not hesitate to declare that they cannot compete in European markets, provided America makes good use of her opportunities.

Those energetic business men and capitalists who planned and built railroads from the Atlantic to the Pacific Ocean, and pushed others, in advance apparently of the needs of the time, into the distant and fertile regions of almost every part of the continent, have perhaps "built better than they knew." They were not much in advance of the requirements of Europe for supplies, which they can now bear to ports of shipment which dot the coast from Texas to Maine.

PRODUCTIVE CAPACITY OF THE UNITED STATES.

As data upon which a judgment may be formed regarding the capacity of the United States to produce above the needs of its people, it may be parenthetically stated that the territorial area of Prussia is 347,500 square kilometers, with a population of about 28,000,000. The territorial area of the United States is 9,272,449 square kilometers. If the latter were as densely populated as Prussia they would at the present time have a population of about 750,000,000.

The United States have more than 20,000 miles of interior navigable waters, and more than 120,000 miles of railroads, intersecting every part of the country. With all these ready to bear the fruits of the land to the sea, where they can be exchanged for gold, and with the best material and skill for manufacturing whatever is needed by man: with material in abundance and of the best quality, and unsurpassed facilities for building ships, and with an unlimited market over the seas for their cargoes, there would seem to be no occasion for an idle man in the United States if a wise advantage is taken of the opportunities which now favor their future prosperity. But to do this, and to direct into proper channels all the forces available for developing the great resources of the United States, a fixed national commercial policy is indispensable.

AMERICAN ADVANTAGES.

History shows that whenever a people, organized under constitution forms of government, have attained intellectual or physical supremacy among the nationalities of the earth, it has been achieved mainly through the influence and instrumentalities of active commerce; that is, by the adoption of a governmental policy which provides, as far as possible, for the thrift and contentment of its people by keeping them busy. The history of England is a marked example of this fact. The pursuit of active industries, encouraged by national legislation, and so protected as to insure the hope of gain and comfort, brightens the fac-

ulties of a people, and develops an ambition which advances civilization and leads them up to the higher planes of life. On the contrary, whenever a nation, favored with natural advantages, has neglected to foster such business principles among its people, its prestige and power have waned. Where the resources of a country are overtaxed by a surplus of population, or have become weakened by other causes, such as exhaustion of natural resources, its struggle to maintain its status among neighboring states will begin. Sometimes national pride will substitute increased physical power for weakened natural and civil forces, and powerful and menacing armies are maintained. War, sooner or later, ensues, and the discomforts of the overburdened nations are made still worse, and their decline hastened by the desolations which follow.

But the United States have no burdens of this kind and no hostile neighbors that will antagonize a peaceful policy for promoting the contentment of their people by keeping them busy. No nation has ever existed that has been so favored as the American States with opportunities for securing, through the instrumentalities of an interior and active foreign commerce, not only supremacy for republican forms of government, but also for securing permanent national wealth and prosperity. Their interests in commerce and agriculture, when measured by the conditions and probable demands of Europe, in the immediate future, seem stupendous, and the responsibility of providing for the wise management of such interests in behalf of the popular welfare is correspondingly great. The relations of the General Government to those of the different States; to foreign nations; to advanced popular culture and material civilization, at home and abroad, and to all those elements that make a nation great and its people happy, appear to be involved in the manner in which are used the rare commercial opportunities which nature has placed at the disposal of the American republic. When considering the densely populated districts of Europe and other parts of the earth, these commercial powers become forces within the control of the General and State Governments, and are of exceptional interest to the people of the entire world. How to manipulate them so that all the advantages they present can be permanently utilized in behalf of the country appears to be a question of paramount importance, and deserving of such careful study and arrangement as could be apparently best provided for under a governmental department of commerce and agriculture, so well and thoroughly organized as to be in a measure free from the changes and instability incident to party domination. In Germany and France, whose interests in commerce and agriculture are dwarfed in the remembrance of those that are growing in the United States, such departments are regarded as among the most important portfolios connected with the Government; in Germany, so important, indeed, that the Chancellor of the Empire, Prince Bismarck, took that of commerce under his own guidance.

European statesmen who are familiar with the skill of American mechanics and the great resources of their country, often express astonishment that the United States should not long ago have inaugurated a commercial policy which would have prevented its enormous freight business from being monopolized by foreign ships. They know how important an industry shipbuilding is, and they know, too, what important advantages accrue to a nation from building and sailing its own ships. They know, too, that the United States is the only country that has the capacity and facilities for building ships and furnishing them with cargoes from surplus productions which can find a ready market in all parts of the world. It is not, therefore, surprising that they cannot under-

stand a policy which, while rapidly developing the internal resources of the country by encouraging manufactures, and by large appropriations for improvements of rivers and harbors, and for building railroads, should not only make no corresponding provision for the growth of its merchant marine, but allow it to decay with such rapidity as to almost disappear.

While wisely making provisions for bringing the prolific fields of the distant interior almost to the sea-side with their wealth of cargoes for all parts of the world, the richer and more influential industry of distributing them has been allowed to fall into foreign hands. If Great Britain, anxious to find a substitute for some failing industry at home, had controlled American enterprise and capital in her own interests, what better could she have done for herself? American cargoes almost wholly under foreign flags, furnish European statesmen with a fertile topic for discussion and criticism.

It is undoubtedly the interest of European powers to monopolize, as far as possible, the carrying trade of the United States. They know that the flag of a nation carries influence, and that the people all over the world are largely swayed in forming their judgment of the power and productive capacity of a country by the frequency with which its flag appears at the mast-head of its commercially laden ships. Often seen in foreign ports it engenders respect and confidence, and thus opens new avenues to healthy trade. If the commerce of the American States was conducted in American bottoms, their ships would dot the seas in every climate, and their flag be familiar in all parts of the world. By building and sailing American ships, something more would, therefore, be accomplished for the country than reviving active industries in American shipyards, and furnishing employment to thousands of mechanics and sailors. The great commercial benefits arising from international intercourse would be secured, and the principles of peace and civilization steadily advanced.

J. F. POTTER,
Consul.

UNITED STATES CONSULATE,
Crefeld, March 10, 1883.

AMERICAN FURNITURE IN BELGIUM.

REPORT BY CONSUL TANNER, OF LIEGE.

I have had a steady and fixed impression since the outset of my service here, that this country offered a field for the importation of American furniture. This impression led me to make an experiment with results as follows: Seeing an advertisement in a New York paper, which announced "fine, high-topped walnut bedsteads at $8," I wrote to the firm and told them that I would like them to send me one of the bedsteads thus described, and told them also that my principal object in ordering it was to see if something could not be done here by American dealers. After many delays, and some cavalier treatment, the bedstead came with the following results:

Cost of bedstead in New York	$8 00
Cost of packing	3 00
Cost of transportation to Liege	8 00
Total cost, duty not included	19 00

The agent of the line by which the bedstead was sent, explained to me the apparent enormity of the charge in transportation by saying, "If one dozen bedsteads had been shipped, perhaps the dozen would not have cost more than this one." This being true, a bedstead such as the one spoken of, could be placed here I think, duties included, at something like $14. I called in a furniture manufacturer and a dealer in Liege, and asked them what such a bedstead would bring here? One responded that it would be worth 125 francs or $24; the other, 150 francs or $28.

This shows American furniture manufacturers their opportunity without comment from me.

GEO. C. TANNER, *Consul.*

UNITED STATES CONSULATE,
Liege and Verviers, February 26, 1883.

AMERICAN BEER IN BELGIUM.

REPORT BY CONSUL TANNER, OF LIEGE AND VERVIERS.

Mr. F. Trichmeyer, of this place, who keeps a restaurant and café, applied to me for information and addresses of brewers of beer in the United States. I knew no such addresses, but knowing that Cincinnati and Milwaukee were brewing places, I wrote to the mayors of those cities, and asked them to give me the names of the best brewers. The names of brewers were promptly given, and orders for both Cincinnati and Milwaukee beer were sent. This beer has now arrived, and is giving, I am glad to say, general satisfaction. In all my dispatches to the Department I have steadily adhered and expressed my convictions that there was a market here for almost every American product if the proper efforts were put forth to supply its demands.

Some of my colleagues have differed from me, and maintained that it was best to content ourselves with supplying the mother countries with

food products. Now Belgium is one of the oldest, if not the oldest, beer-producing countries in the world. Ten years ago to talk of shipping beer here would have appeared visionary and a contradiction of terms; to-day we see that it is *un fait positif*, and thus one by one we see what has appeared impossibilities yielding to the progressive march of American superiority.

I take this method of making my sincere acknowledgments to the mayors of Cincinnati and Milwaukee for their prompt co-operation in this matter. I hope that the energy and promptness which the brewers referred to have shown in their shipment, and the care they have given that the beer should meet with no delays, as well as the intelligent directions they have written here as to the best manner of treatment, will meet with its just reward.

GEO. C. TANNER, *Consul.*

UNITED STATES CONSULATE,
Liege and Verviers, February 26, 1883.

AMERICAN TRADE JOURNALS AND NEWSPAPERS ABROAD.

REPORT BY CONSUL TANNER, OF VERVIERS AND LIEGE.

To review the evidences of American energy and enterprise in my consular district, and the fruits accruing therefrom, is one of the most pleasing duties I owe to the Department of State. In doing this it is but right and proper that mention should be made of American newspapers and journals that are received at this consulate, and have a circulation in my consular district.

Hazelitt says: "No man ever does as much as he can do at anything." If this be accepted as true, it is so to a less extent when applied to these publications than to any other branch of our industry known to me; as by far more intelligent activity is shown by them than from all other quarters (so far as my consular district is concerned) combined. The most of these journals are consecrated exclusively to our commerce and industries, as the titles borne by them prove. As heralds of our business men, and the benefit they are to our commerce and national prosperity, their influence would be difficult to overestimate. I seriously doubt if our commerce would have taken those astounding strides which have placed it in the front rank with older nations had it not been *chaperoned* by these able and inimitable journals.

The following publications at their own quoted value, are received monthly at this consulate:

	Single copy
Scientific American	$0 50
American Monthly Commercial Review, &c	30
American Mail and Export Journal	25
The Export Journal	20
Dry Goods Bulletin	15
American Manufacturer and Iron World	20
Northwestern Miller	20
All others	40
Making a total of gratuitous publications	2 20

As these journals are thus sent, it is to be presumed that they are sent in the same manner to all other legations, consulates, vice-consulates, and consular agencies. If this be true, there are: Legations, 34:

consulates, 313; vice-consulates, 313; consular agencies, 400; total, 1,060. This would make a total free distribution of American periodicals to Government employés, not including postage (no mean item), enveloping, and cost of labor in preparing them for the post, of a sum not far short of $3,000 per month or nearly $40,000 per annum. These publications, collectively, have something like 7,000 advertisements, representing the interests of more than twice that number of persons engaged in business and a capital of many millions of dollars.

Many of the articles advertised are represented with much skill, if not art, by engravings that attract the eye and recommend the article to purchasers.

While the person inserting an advertisement in a journal unquestionably seeks his own benefit, this benefit has a far wider range; its ramifications go to the laborer that produced the article advertised, to the printer that sets up the advertisement, the merchant and his clerk, to those who handle it, to the railroad or ship that transports it, and to the commerce of the nation. As a stimulus for trade no better method has to the present time been discovered. It is a simple proposition to show the number of persons benefited by the sale of an article caused by an advertisement and to show the relations it bears to our commerce, industry, and national prosperty.

I have on file at this consulate, collected in a six years' residence here, nearly two hundred letters from different places adjacent to and in Liege and Verviers, making inquiry about dealers in numerous articles in the United States, and asking for addresses. Had it not been for these journals I do not know how I would have ever answered such letters. If I had failed to do so the consequences are palpable; some American industry would have doubtless suffered by my failure. These inquiries I found so frequent that, in order to facilitate matters, I keep a register of all advertisements in the journals sent to this consulate in alphabetical order, and when a demand of this character is made on me I do not return the reply, "the names of such dealers are not known to me," but simply turn to the register and the task is easy. I have been able in this way to answer every inquiry either in writing or otherwise, save one, and that of a furniture manufacturer in the United States.

In point of merit in editing, style of printing, and general appointment too much praise cannot be bestowed upon the publications. They stand unique and unequaled anywhere in the world. There is no possible agency that can take their places in giving others an insight into our national characteristics, civilization, and progress, and that can go further in generating that respect that it is the object of all government to promote, and so agreeable for Americans to find existing when they visit foreign countries.

I will not attempt to constitute myself spokesman for the diplomatic and consular corps, but I think I am but speaking the sentiments of every recipient of these journals when I say that apart from their actual usefulness they take away half of that monotony that usually weighs so heavily on those who live out of their native country. They give us that clear and intelligent insight into the complexities of our commerce and industry that goes far to increase our usefulness and make us more efficient officers. And yet as much as I appreciate these publications, and as useful and acceptable as they are to me, I could not afford out of my small compensation the tax that a paid subscription would impose.

In the line of my duty to the Department of State perhaps I am of some indirect benefit to these journals, as they make frequent use in

their columns of information furnished by me to the Department for the benefit of their subscribers.

The reports of our diplomatic and consular corps are in this way irrigating sources to them, but this is an incumbent duty, even if these journals had no existence therefore they are under no obligations to me that I can perceive, while my dependence has already been made apparent.

The Department spends thousands of dollars per annum to publish the reports of our consuls. The importance of their publication is proven in the fact that England and all other European governments are setting to work to imitate us in this particular. These journals aid the government in this undertaking, and as their prime object is the advancement of our commerce, national industries, and general prosperity, and as there is clearly a balance from some quarter, to be readjusted in favor of these journals, it seems to me, even admitting that matters of this kind find their own level, and the publishers of these journals know what they are doing in sending them so liberally, it is but just and right that the Government of the United States should reimburse the publishers, thus aiding them in the good work they are engaged in, and relieving them of the enormous annual loss for which otherwise I can see no adequate return. It is difficult for me to perceive how objection could be found to this proposition from any quarter. These publications are purely non-political, and, as already stated, devoted entirely to our commerce and industries, and anything that goes to their advancement never fails to occupy a conspicuous place in their columns.

If my premises are conceded that these journals tend to promote the national prosperity, I am sure that the nation cannot but be willing to pay for such benefits, and that it does not wish its employés to be the recipients of favors on which their usefulness in some measure rests without some return to those conferring such favors.

The following table will show the American newspapers that have a paid subscription and the value in my consular district, as near as I have been able to ascertain:

New York Herald, 20 copies, at $10 per year	$120 00
New York Commercial Advertiser, 2 copies, at $8 per year	16 00
New York Frank Leslie's Illustrated, 7 copies, at $4 per year	28 00
New York Tribune, 1 copy, at $8 per year	8 00
New York Scientific American, 5 copies, at $5 per year	25 00
New York World, 1 copy, at $8 per year	8 00
Augusta, Georgia, Evening News, 1 copy, at $5 per year	5 00

Being $210 a year in American newspapers that find a circulation in this consular district.

An approximation cannot be made from this of the circulation of American newspapers in other consular districts, as a foreign language prevails; hence this circulation cannot be so great as in countries where the English language is spoken.

I have compiled the above table from my own observations and from extended inquiry.

The New York Herald is found at the Casino at Spa, and at the principal hotels of this favorite watering place, at the different clubs, hotels, cafés, Chambers of Commerce, &c., in Liege and Verviers. I have even seen it in the small villages adjacent to this place. It would be difficult to say where it is not found.

Europeans read advertisements much more than Americans; it is in this

way they manage to edify themselves so long with their usually handkerchief-sized papers, which the average American would dispose of in a few moments.

Too much cannot be said of the great enterprise of this journal. Europeans are as familiar with its name and reputation as are Americans. It has its correspondents in every conceivable quarter of the globe, who are so wide awake that they often collect news of occurrences here, transmit it to the Herald, 4,000 miles away, and the Herald reports it here before the local newspapers.

In short, it is a daily history of the world that weaves mankind into one web and knits nations into one family and common brotherhood.

One may possess the best education that instruction and research can promote and brain retain; yet what would such knowledge be worth nowadays if a man could not discuss intelligently the stirring events of the day as reported in our newspapers? Newspaper education enables a great many with barely education enough but to read to not only hold their own with the college graduates, who have in a measure missed such instruction, but to outstrip them and secure better positions, and to appear to equal advantage in society.

The Herald's weather forecasts for Europe, according to a writer in the Times, are the only accurate forecasts of the weather for Europe, and it is asked, "Why cannot our system be brought to the same precision?" These forecasts are eagerly looked for and reproduced in at least twenty different languages, and the benefit they are to our own and the world's shipping interest would be hard to estimate.

Many of our newspapers might find a circulation in my consular district, and when they do I shall be most happy to give them credit for all the enterprise shown by them. There are no western or southern journals that find a circulation here, where the field is as open to all as it is to the Herald.

I am as perfect a stranger to the proprietor and to every employé of the Herald as it is possible to be.

I believe, with the same degree of effort on the part of other American journals, that a large circulation in Europe might be effected, and such journals may be assured of my most active co-operation in any effort they may make to this end.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege and Verviers, February 24, 1883.

HOW TO INCREASE OUR FOREIGN TRADE.

REPORT BY CONSUL TOWLER, OF TRINIDAD.

From a short sojourn of three months in Trinidad I am able, I think, to form an opinion as to a practical method of promoting the interests of the export trade of the United States.

The United States stands the highest in estimation of any country in reference to the number and adaptability of its inventions. The question, therefore, arises: "In what way can the objects of these inventions be brought before the public in foreign countries?"

Answer: The surest, quickest, and safest method would be for the proprietors of such patented objects to send specimens or samples in good working condition, with proper instructions for the successful manipulation and working of the same (freight and duty when feasible

prepaid), to each American consul, accompanied with printed circulars (in the language of the country in which the consul resides) inviting those interested in the special objects of exhibition to wait upon the consul at his office on given days and fixed hours, not interfering with business, to inspect and examine the same, their application and operation. After inspection, interested parties (approved by the consul for their solidity in a business point of view, and through him as consul) might enter into correspondence for the importation.

I must observe, however, that there are two points in this proposed arrangement that are absolutely necessary to gain success, namely: The objects must be thoroughly adapted for the purpose intended, and at the same time they must be cheap. If the objects fail to perform what is claimed they will perform, confidence is lost and success fails.

Secondly, we have two great rivals everywhere, but here in particular, namely, the English and the Germans, who are always on the alert to select what is good and practicable in our inventions, to imitate them, and then to undersell us. Another reason why the articles must be cheap is this: Here, as well as in other parts of the world, dollars are not so abundant as in the United States. An instance will illustrate this point: The high-priced nickel-plated sewing machines can seldom find a market here, because machines, sometimes imitations, are to be had from England, Germany, and France at one quarter of the American prices. Some few of our own manufacture of course may find admission into the families of the rich, but the tailors, seamstresses, and shoemakers are in general single individuals in business, and are satisfied with sewing machines working with the hand, if they have a machine at all, at from $10 to $20 each.

There are thousands of articles of American manufacture which can be brought before a foreign public in the manner suggested, such as sewing machines, knitting machines, rifles, air-guns, revolvers, cutlery, watches, graduated scales, tools, agricultural implements, photographic apparatus stock, and chemicals, drugs, chemicals and patent medicines, hardware of almost every kind, canned meats and canned fruits, American wines, glass, porcelain, and crockery, clothing of every kind suitable for the country, chromos, paper, Christmas and Easter cards, toys, &c.

The consul in Trinidad offers his services in this project disinterestedly and with the sole desire of promoting the interests of his country, and on the condition that all articles of value shall remain at the disposal of the proprietors after the liquidation of all accidental or unforeseen charges against them.

JOHN TOWLER,
Consul.

UNITED STATES CONSULATE,
Port of Spain, Trinidad, December 16, 1882.

CANADIAN-AMERICAN CARRYING TRADE.

REPORT BY CONSUL PRINCE, OF BELLEVILLE.

The Canadians, not content with the facilities for successful competition with the United States in the carrying trade between the West and East derived from their system of canals connecting the lakes with the river Saint Lawrence, bid fair to become influential rivals with the great trunk railway lines of the United States in their business from the great

West to the seaboard, and *vice versa*. My attention has been called to this more particularly by the movement of barley, the chief grain export from this district, from this port. Up to the year 1879 the shipment of barley by rail from this district during the winter was an exception. In that winter (1879–'80) small quantities of grain began to go by rail to the West mainly; about 30,000 bushels were so sent. In the winter of 1880–'81 about 50,000 bushels, and in 1881–'82, after the Grand Trunk had completed their Chicago connection, the amount ran up to nearly a quarter of a million bushels. The present winter, judging by the month of January, bids fair to exceed that amount. Previous to this all the grain from this district was shipped by vessels to the lake ports in the United States, and thence distributed by our canals and railways to the consumer. Now the consumer is being supplied direct from the elevators here, and cars are dispatched to Saint Louis, Chicago, Milwaukee, and all important points West and Southwest, and to Boston, Albany, New York, and Eastern points. The significance of this fact should not be overlooked. Grain from Chicago and Milwaukee to Portland and Boston is carried on Canadian railways between Sarnia and the Vermont line near Island Pond, leaving but a very small portion of the haul to the American lines. The development of the Canadian Northwest strengthens their position in this respect, and even now their citizens are prophesying that the new province of Manitoba, with Winnepeg for its chief city, will soon be a distributing point for the supplies of our Northwestern States.

I herewith inclose an extract of a report of an interview with Hon. Lewis Wallbridge, formerly speaker of the Canadian Parliament, an old resident, recently appointed chief justice of Manitoba, in which it will be seen this view is entertained.

All the Canadian railways are seeking for this great Western and Northwestern trade. While the Canadian Pacific intends to monopolize all the trade of Northwestern Canada, having by its charter a complete monopoly (no competing lines being allowed except such as shall run southwest or to the westward of southwest, nor to within 15 miles of latitude 49°), the Grand Trunk Railway seeks additional trade by completing the Midland system to Georgian Bay, connecting with the Bay of Quinte at Belleville. Already in this district a large elevator is erected and two more are projected, and it looks as if soon all Canadian grain, besides a good portion of our Western grain, would reach the consumer and the seaboard as far as it can be done by Canadian transportation.

The recent decision of the people of the State of New York to abolish tolls on the Erie Canal is creating a strong feeling for the abolition of tolls on the Canadian canals, in order to meet what they see will give the Erie increased trade, and the principal papers of the Dominion, from Nova Scotia to British Columbia, are demanding free canals for Canada. If this be done, there can only be one remedy, and that is the construction of a canal across the peninsula between Lakes Erie and Michigan and the extension of canal navigation to the Mississippi. The advantages we will then have in harbors (open in winter for shipments by rail) should be supplemented by increase of our merchant marine.

I append a table showing the export of barley from this district, its amount and value, for the years 1880, 1881, and 1882.

THEODORE O. PRINCE,
Consul.

UNITED STATES CONSULATE,
Belleville, Canada, February 9, 1883.

Table showing the export of barley from the consular district of Belleville, Canada, in value and amount, for the years 1880, 1881, *and* 1882.

	1880.		1881.		1882.	
	Bushels.	*Value.*	*Bushels.*	*Value.*	*Bushels.*	*Value.*
First quarter	48,852	$28,812 70	54,416	$48,362 10	240,499	$214,2[illegible]
Second quarter	7,312	4,993 00	47,758	39,190 20	116,534	104,[illegible]
Third quarter	27,239	17,585 09	26,703	23,904 05	1,000	[illegible]
Fourth quarter	845,185	579,873 19	792,749	754,289 46	748,633	576,657 [illegible]
Total	928,588	631,243 98	921,626	865,745 81	1,106,666	[illegible]

TRADE BETWEEN BELGIUM AND THE UNITED STATES.

REPORT BY CONSUL WILSON, OF BRUSSELS.

DECLINE IN IMPORTS FROM THE UNITED STATES.

Since the date of my annual report full statistics of the trade between this country and the United States for 1882 have been furnished me. I have therefore the honor to transmit herewith a tabular statement of the commerce of the entire year of 1882, compared with that of 1881 and 1880. From this statement it will be seen that the value of the imports from the United States to this country has gradually fallen off for the last two years.

In 1880 it amounted to $56,401,788, in 1881 to $48,193,465, and in 1882 to $43,033,640, thus showing a decrease in value of $13,368,148 from 1880 to 1882. In the articles of wheat, flour, corn, hams, and bacon this shrinkage has been most marked, amounting together in the above-mentioned time to $12,497,210.

CAUSES OF THE DECLINE.

The trichina scare.—With regard to our salted meats, the value of the import shrinkage of which alone amounted to $7,258,704, it is probable that a lack of care in selecting and preparing them for these markets has to some degree affected their sale; but their interdiction by France in 1880, on account of assumed unsoundness, unquestionably created a wide spread panic throughout Switzerland, Rhenish Germany, and this entire country, which has not yet altogether subsided; and as all this territory is largely supplied with its American imports through Belgium, there is but little doubt that the trichina scare yet lingering among the less intelligent people is the chief cause of this decline in the import of our hams and bacon. Yet from a personal knowledge of the quality of the pork product now arriving in this country from the West, I am convinced that it is equal, if not superior, to the best product of Westphalia or any other country now sold in these markets. It is none the less true, however, that the common people do yet have a dread of American pork, which unscrupulous dealers are not at all anxious to dispel as long as they can so act upon their fears as to sell them prime American hams at the life-insurance advance in price paid for genuine "Westphalia," warranted not to kill from trichina. In the retail shops of any of the cities and towns of this kingdom hams may be daily seen that are unmistakably American, yet scarcely a retailer can be found who will acknowledge that any of his good hams are American. If, however, he happens to have fallen upon a bad lot from Germany, Hungary, or elsewhere, he will (knowing that American pork is yet more or less under the ban) take particular pains to inform his customers that

if not "American" he at least does not know where they are from. This unfounded and unreasonable prejudice against our pork, I am happy to say, is fast dying out, and will doubtless soon subside entirely in Belgium at least, for such is the superior quality of hams and bacon now being sent to this country that they must in the end recommend themselves. As an evidence of this fact I will here mention that I recently requested an importer in Antwerp to send me a few good specimen hams, and that after giving a number of my friends an opportunity of testing their quality I was requested to order a supply for each of them. On this subject I will only add that notwithstanding the yet lingering prejudice of the people against the American hog, and the present effort of Germany to revive it, if our packers and shippers will only continue to furnish to these markets as good, sound, and well-cured pork product as they have been doing, we may safely predict a greatly increased export for the future, for the price at which we can furnish this material in good quality will defy all competition.

THE EVIL OF AMERICAN GRAIN SPECULATION.

In a report to the Department, on the 17th of May last, I mentioned the fact that in consequence of the rapid fluctuation in the prices of our food produce, and the abnormal state of this trade, induced by speculative operations, many dealers in this produce, both in Belgium and elsewhere on the Continent, had taken quite a gloomy view of the subject, and had predicted a rapid decline of this trade unless something could be done to stop the growing evil.

Whilst it is a satisfaction to know that these predictions have only been realized to a limited extent, it is nevertheless more than probable that if this produce had not been subject to this influence the value of its exports in 1882, instead of being more than $6,000,000 less than in 1881, and more than $12,000,000 less than in 1880, would largely have exceeded the figures for both these years.

It is only a few years since the attention of the people of this country was called to the importance of our corn or maize as an article of food for man and beast, as well as for distilling purposes; and from the arrival of the first considerable cargo until 1880 its imports grew with marvelous rapidity, chiefly in consequence of its adoption into general use by distillers throughout the kingdom, instead of the more extensive grain of the country.

Seeing, however, that between 1880 and 1882 the value of this import declined from 48,423,020 francs to 10,821,443, I have endeavored to ascertain if possible to what causes, if any, in this country, this result might be attributed; and the reply to all my inquiries on the subject has been that in consequence of the constantly fluctuating and unreliable prices of the American markets for this grain, distillers, no longer able to base upon it any satisfactory calculation of the profits of their distilleries, have largely abandoned its purchase, preferring to use the grain of the country, for which a greater uniformity of prices rule; and I have but little doubt that this has, indeed, had much to do with the recent enormous shrinkage of our export of corn to this country. As before remarked, the imports of corn and oats are registered in the custom-house under one head; as there is, however, but an insignificant quantity of oats shipped from the United States to this country the figures above given may be regarded as approximatively correct for corn exclusively.

The statement of the cotton import for 1882 also embraces that re-

ceived from all countries without distinction. It is therefore impossible to say exactly what portion of it was received from the United States; but from other sources of information I learn that the increase in 1882 over that of 1881 was principally from the United States.

AMERICAN FURNITURE.

It is to be regretted that, in furnishing statistics of the foreign trade of Belgium, the custom-house authorities omit the mention of many articles for which a very considerable market is found here; for instance in the table herewith inclosed, compiled from the Moniteur Officiel, the value of sawed and otherwise prepared lumber is given, whilst no mention whatever is specially made of the amount and value of our furniture of various kinds sold here, notwithstanding the fact that a very considerable quantity of our cheaper sorts is imported and finds a ready sale. It is but a few days since a dealer in this city informed me that he had an order to furnish one of the public schools of the country with 400 American school desks, and that he yet anticipated larger orders of the same kind.

For all our cheap and ingenious manufactures of which wood, other than pine, is the chief constituent there is a growing demand here, which in time will doubtless lead to a large importation of our more luxurious and expensive manufacturers in wood.

JOHN WILSON, *Consul.*

UNITED STATES CONSULATE,
Brussels, Belgium, February 14, 1883.

Import and export trade between Belgium and the United States for the years 1880, 1881, *and* 1882 *compared.*

	Imports from the United States.			Exports to the United States.		
	1882.	1881.	1880.	1882.	1881.	1880.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Arms	205, 811	137, 554	31, 754	2, 017, 412	1, 347, 028	1, 229, 325
Barley	91, 740	97, 073	321, 000			
Beef	600	106, 500	803, 400			
Books	8, 351	11, 571	13, 398	25, 613	21, 315	
Building stones				6, 735	38, 305	21, 075
Clothes				490, 392	84, 213	88, 092
Coffee	3, 906, 647	4, 164, 235	2, 655, 950			
Cotton:						
All countries	47, 500, 000	36, 100, 000	38, 000, 000			
Goods				892, 824	971, 604	171, 700
Laces				14, 700		
Flour	5, 940, 638	7, 651, 868	6, 157, 541			
Glass:						
Plate				1, 574, 331	1, 067, 790	492, 971
Ware				685, 938	638, 289	587, 813
Window				9, 622, 270	9, 869, 354	10, 674, 858
Hardware	33, 058	28, 764	60, 360			
Horses	64, 000	80, 800	52, 800			
Iron, and manufactures of	3, 119	22, 755	5, 002	2, 290, 487	4, 661, 276	4, 606, 067
Lard and grease	11, 600, 410	10, 424, 052	21, 018, 317	1, 116, 634	279, 958	
Lead				198, 000	220, 000	64, 300
Linen goods				1, 000	123, 615	257, 570
Linen laces				5, 000	6, 000	4, 150
Lumber	2, 118, 750	1, 661, 410	936, 870			
Machinery				1, 147, 504	345, 872	248, 611
Meat, salted	2, 555, 378	12, 737, 511	17, 180, 739	255, 653	37, 230	4, 298
Oats and corn	10, 821, 443	28, 224, 909	48, 423, 020			
Oil	1, 041, 912	259, 068	1, 379, 109			
Oleaginous grain	770, 908	1, 108, 908	42, 020			

Import and export trade between Belgium and the United States, &c.—Continued.

	Imports from the United States.			Exports to the United States.		
	1882.	1881.	1880.	1882.	1881.	1880.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Paper				130, 126	138, 845	102, 557
Pearled barley		6, 075	1, 052, 125			
Peas and beans	533, 440	172, 097	110, 035			
Petroleum	23, 161, 140	27, 707, 115	20, 206, 497			
Rags				1, 575, 441	868, 253	2, 018, 080
Raw hides	610, 453	1, 132, 248	937, 032	4, 538, 738	4, 180, 800	3, 106, 817
Rosin and bitumen	5, 068, 625	4, 421, 380	3, 075, 680			
Rye	3, 574, 268	1, 998, 417	4, 838, 139			
Soda				19, 198	1, 930	1, 530
Starch	110, 975	239, 506	318, 213			
Steel, and manufactures of				4, 712, 484	2, 436, 785	4, 158, 248
Sugar				316, 542	59, 661	70, 231
Tobacco:						
Leaf	8, 261, 882	6, 853, 734	6, 923, 488			
Manufactured	320, 025	303, 625	344, 500			
Wheat	99, 850, 000	104, 055, 893	117, 350, 255			
Wool				250, 253	2, 091, 275	7, 004, 288
Woolen goods				947, 926	1, 264, 620	2, 678, 116
Zinc				1, 083. 745	1, 197, 950	1, 480, 655
Total francs	228, 158, 573	249, 707, 068	292, 237, 244	33, 919, 446	31, 951, 968	39, 072, 149
Total United States gold	$43, 033, 640	48, 193, 465	56, 401, 788	6, 546, 453	6, 166, 730	7, 540, 925

TRADE AND COMMERCE OF MATAMOROS.

REPORT BY CONSUL SUTTON.

The trade of this district for the year 1882 shows a slight falling off in nearly every article.*

IMPORTS FROM THE UNITED STATES AND EUROPE.

Of the imports from the United States bread and breadstuffs are only about 60 per cent. of last year's values; live animals fall off about 50 per cent.; provisions increase nearly 50 per cent. both from the United States and from Europe; soap from the United States falls off 50 per cent.; starch and tobacco, leaf, from the United States fall off 50 per cent.; refined sugar from the United States increases 50 per cent.; machinery which was before mostly from the United States is now nearly divided; nails from the United States drop to 33 per cent.; boots and shoes from the United States increase 33 per cent.

Of the European imports manufactures of silk drop off 25 per cent., while wine increases by 33 per cent.; wool cloth falls off 25 per cent., and wool shawls and wool dress goods about 50 per cent. each; quicksilver changes entirely from Europe and comes from the United States and increases about 100 per cent. over last year.

Articles of wear drop about 50 per cent. from both; cotton hosiery and cotton jeans from Europe drop about 50 per cent. each.; earthenware from Europe loses about 33 per cent. and from the United States about 25 per cent.; flax goods and iron from Europe fall off 50 per cent.; jewelry from Europe drops to 50 per cent. and from the United States to almost nothing; drugs from Europe fall off 50 per cent., and from the United States 25 per cent.; plain cottons from the United States

* During the two last months of the year treated of by the consul, Matamoros was quarantined on account of yellow fever.

increase slightly, while those from Europe go down to only 30 per cent.; colored cottons from the United States increase about 15 per cent. and from Europe fall off to less than 30 per cent.; other manufactures of cotton fall off about 50 per cent. from both sources; fancy articles fall off about 25 per cent. from both; lard from the United States increases about 25 per cent.; paper decreases about 33 per cent. from the United States and increases about the same from Europe, while spirits from the United States decrease about 40 per cent. and from Europe about 15 per cent.

The imports from the United States (table A) show a decrease of $206,843, or 14 per cent.; those from Europe a decrease of $411,167, or 33 per cent.

The exports show a decrease of $569,315, or 40 per cent. This decrease is, however, almost entirely in silver, which falls off $500,486. Hides and skins also fall off $134,427, while hair and istle fiber increase slightly. The most noticeable is in live animals, which increased over $90,000. The change in silver is of little account, as it is produced elsewhere, and only passes through, but the increased demand for horses and cattle, which are the main products of this section, is of great benefit. This demand is still increasing and bids fair to be the most valuable item in the exports for the coming year.

The table, herewith from A to H will show fully the value and directions of trade.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, March 9, 1883.

TABLE A.—*Statement showing the exports from the United States to the consular district of Matamoros during the year ending September* 30, 1882.

No.	Articles.	Quantity.	Value.
1	Acids		[illegible]
5	Plows, &c		411
6	Agricultural implements		1,[illegible]
8	Horned cattle	head	71
9	Horses	do	295
10	Mules	do	2
11	Sheep	do	13,634
12	Goats	do	150
15	Beer in bottles	dozen	10,113
17	Bells		[illegible]
19	Blacking		5,150
22	Books		1,[illegible]
23	Brass, manufactures of		[illegible]
25	Bread and breadstuffs	pounds	62,217
32	Wheat-flour	do	4,641
33	Small grain		[illegible]
34	Maizena		5,[illegible]
36	Brushes		[illegible]
37	Candles	pounds	38,511
38	Carriages		[illegible]
40	Clocks		1,[illegible]
41	Spices, &c		[illegible]
43	Bitumen coal	tons	3½
44	Combs		[illegible]
48	Cordage	pounds	2,604
50	Cotton, unmanufactured	do	2,800
	Cottons:		
51	Colored	yards	3,271,992
52	Plain	do	1,286,188
53	Cotton, manufactures of		[illegible]
54	Chemicals		[illegible]
56	Earthenware		[illegible]
57	Fancy articles		[illegible]
59	Apples	bushels	68

TABLE A.—*Statement showing the exports from the United States, &c.*—Continued.

No.	Articles.	Quantity.	Value.
60	Other fruit		$4,090
61	Preserved fruit		3,736
65	Glassware		15,759
66	Glue ..... pounds	$170	35
	Hats:		
75	Of wool, &c ..... dozens	139	1,491
76	Of straw		86
80	Hemp, manufactures of		2,538
81	Hides and skins		177
83	Hops ..... pounds	120	21
91	Iron hoops ..... do	5,283	220
92	Castings		22,196
95	Locomotives	1	5,000
96	Engines	1	1,200
97	Boilers		600
98	Machinery		20,869
99	Nails ..... pounds	48,650	3,341
100	Iron, manufactures of		39,662
102	Cutlery		1,611
103	Edged tools		4,025
104	Files and saws		15
105	Fire-arms		18,756
106	Steel, manufactures of		181
106a	Jewelry		81
107	Onions ..... bushels	87	182
108	Lamps		38
109	Lead, manufactures of		315
110	Fine leather		350
111	Leather, sole, &c ..... pounds	524	350
112	Boots and shoes ..... pairs	29,724	51,345
113	Saddlery		1,391
114	Leather, manufactures of		7
115	Lime and cement ..... barrels	13	101
119	Stone, manufactures of		691
120	Matches		420
121	Mathematical instruments		350
122	Organs		40
123	Pianos		2,899
124	Musical instruments		320
125	Turpentine and resin ..... barrels	56	303
126	Tar ..... do	10	160
130	Illuminating oils ..... gallons	128,720	29,866
135	Sperm oil ..... do	40	75
136	Whale oil ..... do		25
138	Linseed oil ..... do	390	365
142	Cartridges		9,037
143	Gunpowder ..... pounds	5,801	1,978
146	Paints, &c		1,917
147	Paintings, &c		300
148	Paper		10,020
149	Perfumery		1,289
151	Printing presses, type, &c		828
152	Hams	11,363	1,974
154	Butter ..... pounds	18,363	4,750
155	Cheese ..... do	5,829	1,089
156	Condensed milk		24
161	Cured fish		3,410
162	Lard ..... pounds	323,422	40,556
165	Pickles		106
168	Potatoes ..... bushels	1,028	2,032
169	Vegetables		136
170	Vegetables, preserved		354
171	Quicksilver ..... pounds	49,425	20,700
175	Salt ..... bushels	8	22
176	Scales, &c		622
180	Sewing-machines		30,206
181	Soap, perfumed		13
182	Soap, other ..... pounds	342,360	18,240
184	Distilled spirits, grain ..... gallons	26,052	12,537
186	Distilled spirits, other ..... do	9	34
187	Spirits of turpentine ..... do	98	47
188	Starch ..... pounds	97,617	5,495
191	Sugar, refined ..... do	361,082	36,832
192	Molasses ..... gallons	15	13
193	Candy		931
194	Tallow ..... pounds	35,437	1,900
195	Tin, manufactures of		1,732
196	Tobacco, leaf ..... pounds	70,508	68,230
199	Tobacco, manufactures of		44
200	Trunks		5,547
201	Umbrellas		2
2	Varnish ..... gallons	5	6

TABLE A.—*Statement showing the exports from the United States, &c.*—Continued.

No.	Articles.	Quantity.	Value.
205	Vinegar ..... gallons..	310	$186
208	Wearing apparel	.....	87
211	Boards, &c ..... feet..	706	29, 35
213	Shingles ..... thousand..	348	2, 32
215	Barrels, empty	.....	7
220	Masts, logs, &c	.....	1
223	Furniture	.....	14, 36
224	Woodenware	.....	45
225	Wood, manufactures of	.....	11, 62
227	Wool, carpets ..... pounds..	18	1
228	Wool, manufactures of	.....	11, 06
232	Chocolate	100	2
	Total	.....	1, 147. 15

TABLE B.—*Imports of European goods into the consular district of Matamoros during the year ending September* 30, 1882.

No.	Articles.	Quantity.	Value.
9	Chemicals, not otherwise specified	.....	$972
10	Chloride of lime	.....	*119
11	Cocoa ..... pounds..	23, 388	*4, 109
13	Coffee ..... do....	767, 555	*91, 331
14	Tea ..... do....	2, 649	*1, 267
47	Other articles	.....	*602
49	Beer, ale, &c ..... gallons..	273	278
50	Books	.....	4, 207
51	Brass, manufactures of	.....	2, 052
57	Rice ..... pounds..	244, 657	5, 62
63	Breadstuffs	.....	22
65	Buttons	.....	3, 970
66	Chemicals	.....	9, 090
68	Clothing, ready-made	.....	17, 385
68	Articles of wear	.....	19, 879
74	Copper, manufactures of	.....	1, 452
	Cottons:		
76	Plain ..... yards..	652, 830	43, 725
77	Printed ..... do....	588, 511	57, 151
	Cotton:		
78	Hosiery ..... yards..	.....	4, 587
79	Jeans, &c ..... do....	130, 550	23, 525
80	Other manufactures of	.....	69, 702
81	Earthenware	.....	17, 739
82	Fancy goods	.....	11, 627
85	Sardines	.....	9, 544
88	Flax, yard goods	.....	25, 207
89	Flax, other manufactures	.....	11, 272
90	Fruits	.....	8, 063
91	Furs	.....	10, 588
97	Glass, manufactures of	.....	5, 156
103	India rubber, manufactures of	.....	10
106	Bar iron ..... pounds..	519, 619	9, 177
108	Hoop iron ..... do....	8, 000	141
109	Railroad rails ..... do....	388, 400	4, 934
110	Sheet iron	.....	291
112	Hardware	.....	655
113	Chains, &c., iron ..... pounds..	22, 739	1, 049
114	Machinery	.....	32, 314
115	Fire-arms	.....	374
116	Steel bars	.....	1, 843
117	Steel rails ..... pounds..	226, 440	3, 418
118	Cutlery	.....	4, 808
119	Files, &c	.....	1, 798
120	Saws and tools	.....	139
121	Other manufactures of iron and steel	.....	35, 134
122	Jewelry	.....	6, 095
128	Lead, manufactures of	.....	62
129	Leather, all kinds ..... pounds..	1, 012	958
130	Gloves, kid ..... doz. pairs..	21	180
131	Leather, other manufactures of	.....	12, 054
132	Stone, manufactures of	.....	22
133	Metal, manufactures of	.....	5, 814
134	Musical instruments	.....	1, 601
134	Olive oil ..... gallons..	3, 678	5, 169
130	Vegetable oil ..... do....	139	132

* Imported into the United States free of duty and imported here from the United States.

TABLE B.—*Imports of European goods into consular district of Matamoros, &c.*—Continued.

No.	Articles.	Quantity.	Value.
146	Paints		$62
148	Paper, writing		12, 651
150	Paper, other manufactures		10, 877
151	Perfumery		4, 794
154	Provisions		6, 057
159	Silk piece-goods		232
160	Silk hosiery		30
161	Silk, other manufactures of		24, 437
164	Caustic soda ..... pounds..	7, 555	300
166	Spices		3, 456
167	Straw, manufactures of		509
174	Tin plate ..... cwt..	1, 029	3, 559
177	Cigars and cigarettes ..... pounds..	2, 942	4, 809
178	Tobacco, manufactures of		54
180	Spirits in casks ..... gallons..	3, 426	3, 573
181	Spirits in bottles ..... dozen..	4, 098	20, 531
182	Wine in casks ..... gallons..	57, 646	23, 924
183	Wine in bottles ..... dozen..	9, 914	30, 977
184	Wood, manufactures of		5, 528
190	Wool cloth		49, 834
192	Wool shawls		13, 184
193	Wool blankets		6, 497
194	Wool carpets		393
195	Wool dress goods		9, 459
196	Wool hosiery		179
197	Wool, other manufactures		13, 380
200	All other dutiable articles		4, 647
	Total		342, 205

TABLE C.—*Statements showing the comparative imports into the consular district of Matamoros from the United States and Europe during the year ending September* 30, 1882.

MOSTLY FROM UNITED STATES.

No.	Articles.	United States.	Europe.
1	Beer, ale, &c	$21, 025	$218
2	Live animals	19, 625	.....
3	Bread and breadstuffs	55, 011	.....
4	Cartridges, arms, and powder	29, 771	374
5	Coal oil	29, 866	.....
6	Provisions	57, 859	6, 057
7	Sewing-machines	30, 206	.....
8	Soap	18, 258	.....
9	Starch	5, 495	.....
10	Refined sugar	36, 832	.....
11	Tobacco (leaf)	68, 230	.....
12	Castings (iron)	22, 196	.....
13	Nails	3, 341	.....
14	Boots and shoes	51, 345	.....
15	Lard	40, 556	.....
16	Boards	29, 355	.....
17	Furniture	14, 563	.....
18	Quicksilver	20, 700	.....
	Totals	554, 229	6, 672

MOSTLY FROM EUROPE.

1	Coffee	.....	$91, 331
2	Articles of wear	$975	19, 819
3	Cotton hosiery	.....	4, 587
4	Cotton jeans	.....	23, 525
5	Earthenware	3, 539	17, 729
6	Flax yard-goods and others	.....	36, 479
7	Bar iron	.....	9, 177
8	Jewelry	81	6, 095
9	Silk, manfactures of	.....	24, 437
10	Wine	.....	54, 901
11	Wool cloth	.....	49, 834
12	Wool shawls	.....	13, 184
13	Wool dress-goods	.....	9, 459
	Totals	4, 595	360, 557

TABLE C.—*Statements showing comparative imports into district of Matamoros, &c.*—Cont'd.

FROM BOTH EUROPE AND THE UNITED STATES.

No.	Articles.	United States.	Europe.
1	Drugs and chemicals	$34,834	$10,662
2	Cottons, plain	102,904	43,725
3	Cottons, colored (printed)	246,900	57,151
4	Cottons, other	50,217	69,742
5	Fancy articles	17,121	11,627
6	Paper, manufactures of	10,020	23,358
7	Glass and glassware	15,759	5,156
8	Spirits, distilled, grain and other	12,571	24,186
9	Machinery	20,869	23,214
	Totals	511,195	268,369

TABLE D.—*Statement showing the exports from Matamoros to the United States during the year ending September 30, 1882.*

No.	Articles.	Quantity.	Value.
22	Silver bullion		5,840
23	Silver coin		165,199
	Total coin and bullion		171,039
2	United States products brought back		825
9	Chemicals, not otherwise specified		163
28	Hair ..... pounds	148,799	28,866
29	Hides		96,221
29a	Skins		182,594
30	Personal effects		4,945
38	Rags ..... pounds	72,150	653
40	Seeds		3
47	Istle		85,240
47a	Bones		1,639
	Total		401,129
	Add coin and bullion		171,039
	Total free of duty in the United States		572,168
48	Live animals ..... head	22,118	172,265
51	Old brass		9
55	Indian corn ..... bushels	1,308	182
55a	Books		13
60	Flour ..... barrels	19	153
69	Articles of wear		16
74	Old copper ..... pounds	9,515	452
80	Cotton, manufactures of		23
81	Earthenware		169
82	Fancy goods		112
85	Sardines ..... quarter boxes	109	8
88	Flax, manufactures of		23
90	Fruits		75
97	Glass, manufactures of		147
106	Bar iron		4
121	Iron and steel, manufactures of		126
127	Lead in pigs ..... pounds	124	5
129	Sole leather ..... do	1,121	322
131	Leather, manufactures of		58
132	Stone, manufactures of		51
131	Olive oil ..... gallons	97½	167
148	Writing paper		2
154	Fruits, preserved		9
161	Silk, manufactures of		39
166	Spices, pepper ..... pounds	461	100
167	Straw hats		1
168	Brown sugar ..... pounds	5,505	378
176	Leaf tobacco ..... do	7	3
180	Spirits in casks ..... gallons	307	401
181	Spirits in bottles ..... do	167	493
182	Wine in casks ..... do	6,283	6,675
183	Wine in bottles		241
184	Wood, manufactures of		40
189	Wool, raw ..... pounds	84,010	7,833
190	Wool, cloth ..... do	87	265
197	Wool, other manufactures		34
200	All other articles		2,179
	Total dutiable		189,004
	Add free of duty in United States		572,168

Imports of American goods during the four years ending September 30, 1882, consular district of Matamoros.

Articles.	1879.	1880.	1881.	1882.	Grand total.
Agricultural implements	$1,676	$1,854	$1,455	$1,707	$6,692
Animals, live	(*)	36,585	41,432	19,625	97,642
Ale and beer	33,268	21,058	22,293	21,025	97,644
Books	915	1,555	2,624	1,386	6,480
Brass, manufactures of	380	312	39	228	959
Bread and breadstuffs	15,815	85,508	95,038	55,174	251,535
Candles	10,382	6,911	8,796	5,950	32,039
Carriages	6,330	5,120	7,814	3,323	22,587
Cotton goods, colored	223,279	176,903	208,680	246,900	855,792
Cotton goods, bleached	90,267	112,615	174,694	153,121	530,697
Cartridges and arms	10,283	34,261	29,376	27,793	101,713
Chemicals and drugs	22,640	27,745	45,881	34,834	131,100
Earthenware	665	2,712	4,302	3,539	11,218
Fancy articles	6,748	13,747	22,837	17,121	60,453
Glass, manufacturers of	10,884	10,111	14,441	15,759	51,195
Rubber, manufactures of	1,080	1,862			2,942
Bar iron and nails	5,947	3,775	11,814	3,341	24,877
Machinery	24,654	46,170	50,943	20,869	142,636
Locomotives			5,000	5,000	10,000
Iron and steel, manufactures of	16,220	54,539	65,380	59,710	195,849
Boots and shoes	37,498	40,855	38,899	51,345	168,597
Leather, and other manufactures of	1,966	2,648	3,902	2,098	10,614
Lime and cement	113	218	725	101	1,157
Matches	778	1,394	1,050	420	3,642
Oils, illuminating	59,972	16,791	36,175	29,866	142,804
Linseed and all other oils	2,091	4,688	786	465	8,030
Gunpowder	3,777	975	2,075	1,978	8,805
Paint and varnish	2,439	2,566	6,322	1,923	13,250
Paper	12,667	9,033	16,615	10,020	48,335
Perfumery	334	921	1,350	1,289	3,894
Bacon, butter, cheese, and lard	46,164	55,191	58,045	48,369	207,769
Potatoes and other vegetables	2,182	2,786	3,351	2,522	10,841
Quicksilver				20,700	20,700
Rice	16	10	67		93
Salt	182	268	269	22	741
Scales	1,890	952		622	3,464
Sewing-machines	41,545	33,108	34,533	30,206	139,392
Starch	11,114	8,566	11,933	5,495	37,108
Soap	20,601	19,263	28,679	18,253	86,796
Sugar	27,759	27,982	44,090	36,832	136,663
Tobacco, leaf	129,558	101,361	113,512	68,230	412,661
Wearing apparel	3,464	1,390	1,681	975	7,510
Wood, manufactures of	27,348	44,285	57,638	58,489	187,760
Wool	2,874	7,058	7,352	11,019	28,303
Distilled spirits:					
Grain	(*)	2,646	9,634	12,537	24,817
Other	(*)	2,225	10,376	34	12,635
Not elsewhere stated	263,848	93,964	52,100	36,940	446,852
Totals	1,181,613	1,124,517	1,353,998	1,147,155	4,807,283

*Included in "not elsewhere specified."

TABLE F.—*Imports of European goods during the four years ending September 30, 1882, consular district of Matamoros.*

Articles.	1879.	1880.	1881.	1882.	Grand total.
Cocoa	$9,084		$3,291	$4,109	$16,484
Coffee	110,064		113,468	91,331	314,863
Tea	1,576	$91	554	1,267	3,488
Quicksilver			10,041		10,041
Books	4,021	3,179	3,950	4,207	15,357
Brass, manufactures of	2,152	3,436	3,817	2,032	11,437
Chemicals, drugs	10,898	7,689	19,323	10,062	47,972
Rice	9,224	6,274	9,966	5,628	31,092
Articles of wear	19,956	40,403	45,883	19,819	126,061
Copper, manufactures of	4,619	2,095	2,675	1,452	10,841
Cottons, plain	271,243	103,447	143,173	43,725	1,480,729
Cottons, printed		213,995	211,594	57,151	
Cotton hosiery		10,397	10,073	4,587	
Cotton jeans, &c		36,387	41,233	23,525	
Cotton, other manufactures of		93,239	97,258	69,702	
Earthenware	12,963	12,826	27,480	17,729	70,998
Fancy goods	5,677	10,105	15,062	11,627	42,471
Sardines	8,370	8,583	6,334	9,544	32,831
Flax, manufactures of	8,073	69,309	72,185	36,479	186,046
Fruits	5,976	3,752	9,110	8,063	26,901

TABLE F.—*Imports of European goods, &c.*—Continued.

Articles.	1879.	1880.	1881.	1882.	Grand total.
Furs	(*)	$46,493	$8,001	$19,568	$65,062
Glass, manufactures of	$4,708	6,711	5,787	5,156	22,362
Rubber, manufactures of	2,297	1,416	164	10	3,887
Bar, hoop, sheet iron, and chains	17,293	11,069	24,181	10,658	63,201
Machinery	24,079	17,480	6,147	32,314	79,979
Steel and iron, manufactures of	10,938	33,717	41,097	44,751	130,503
Steel rails			8,392	3,418	11,810
Jewelry	5,898	10,848	11,765	6,096	34,106
Leather, manufactures of	5,884	13,439	12,959	13,192	45,474
Metal, manufactures of	5,608	4,524	4,311	5,814	20,257
Musical instruments	2,209	5,176	2,283	1,601	11,269
Olive oil		5,306	6,849	5,169	17,324
Papers, manufactures of	16,193	16,734	17,894	23,528	74,349
Perfumery	3,582	2,760	2,835	4,794	13,971
Silk, manufactures of	24,195	32,143	32,082	24,437	112,857
Spices	7,279	4,667	4,416	3,456	19,818
Spirits in casks and bottles	29,062	10,560	28,809	24,104	92,535
Wine in casks and bottles	35,551	33,933	39,750	54,901	164,135
Wood, manufactures of	3,773	6,344	4,952	5,528	20,597
Wool cloth	51,930	65,031	65,551	49,834	461,385
Wool shawls		20,614	22,355	13,184	
Wool blankets		2,282	3,530	6,497	
Wool carpets		590	201	393	
Wool dress goods		19,777	20,481	9,459	
Wool hosiery		19,136	1,849	179	
Wool, other manufactures of		9,381	6,651	13,380	
Not elsewhere stated	49,967	27,467	23,610	47,726	148,770
Totals	783,392	1,052,255	1,253,372	842,205	3,931,224

*Included in "not elsewhere specified."

TABLE G.—*General exports, four years ended September* 30, 1882, *consular district of Matamoros.*

Articles.	1879.	1880.	1881.	1882.	Grand total.
Silver coin	$566,280	$383,887	$631,929	$165,199	$1,748,295
Silver bullion	28,857	53,590	39,145	5,840	127,432
All other money	3,615	4,998	451		9,059
Hides and skins	493,200	408,929	413,242	278,815	1,675,801
Hair		26,362	26,447	22,866	
Wool	16,377	27,009	33,302	7,833	84,521
Istle fiber, &c	1,115	39,704	77,224	85,240	203,283
Live animals	13,930	13,458	82,138	172,265	280,791
Copper	2,983		3,037	452	6,472
Miscellaneous	6,362	7,074	23,632	16,722	53,790
Totals	1,132,719	965,006	1,330,547	761,232	4,189,504

TABLE H.—*Summary for four years ended September* 30, 1882, *consular district of Matamoros.*

IMPORTS.

Class.	1879.	1880.	1881.	1882.	Grand totals.
American products	$1,181,613	$1,124,517	$1,353,998	$1,147,155	$4,807,283
European products	783,392	1,052,255	1,253,372	842,205	3,931,224
Total imports	1,965,005	2,176,772	2,607,370	1,989,360	8,738,507

EXPORTS.

Mexican products	$533,967	$522,536	$659,022	$590,198	$2,305,718
Money and bullion*	598,752	442,470	671,525	171,039	1,883,786
Total exports	1,132,719	965,006	1,330,547	761,232	4,189,504
Total trade	3,097,724	3,141,778	3,937,917	2,750,592	12,928,011

*Taken from imports at Brownsville and estimated at 50 per cent. of total actually sent out.

TRADE AND COMMERCE OF TEHUANTEPEC.

REPORT BY CONSULAR AGENT LANGNER.

Agriculture.—The indigo crop has not been successful this year by absolute want of rain in this season. Coffee plantations, which are situated in the highlands of this district (principally in Santiago Guevea, about twenty leagues north from Tehuantepec), show an increase. The last crop may be calculated on 2,000 quintals. Sugar cultivation is quite neglected on this isthmus, nevertheless the soil is excellent in many parts, and the home want is covered by Oaxaca City. Cotton grows well, but receives very little attention.

Woods.—Of this important branch of produce only Brazil wood deserves to be made mention of, as the other classes are nominal. Brazil has become so scarce that I fear this leading export article of Tehuantepec will soon disappear.

Mines.—Only one is in exploitation, but the result has not been satisfactory.

Imports.—I am sorry that I could not succeed in obtaining specified statements of every line of imported goods, but only a general gross sum of every month. Imports are increasing in consequence of the construction of the interoceanic railroad, nearly all of the materials of which have been contracted and bought in the United States. Dry goods, with which Vera Cruz provided this place exclusively in former times, commence to be imported directly per steamer by way of Panama. Liquors and other articles are conveyed to Salina Cruz by sailing vessels.

Exports.—The exportation of home produce shows about the same as in former years. Brazil wood is nearly exterminated close to the coast, and the little remnant in Inchitan and Yxtaltepec would not defray the expenses of export.

Navigation.—Statement C gives an accurate explanation of entered and cleared vessels. The lighter crafts existing here for discharging purposes amount to ten; besides these Salina Cruz possesses three boats.

ALEX. LANGNER,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Tehuantepec, January 31, 1883.

Statement showing the imports at Salina Cruz for the year ending December 31, 1882.

Month.	Packages.	Value.	Amount of duties.	Countries whence imported.
January	417	$3,463	$1,974	Europe and United States.
February	150	7,853	3,741	
March	1,878	10,955	4,294	
April	3	63	2	
May	869	9,696	2,728	
June	19,157	21,818	14,530	
July	126	1,721	501	
August	92	640	373	
September	379	5,852	2,350	
October	669	14,492	11,924	
November	3,885	39,460	865	
December	243	2,194	523	
Total	27,868	118,237	43,805	

Statement showing the exports from Salina Cruz for the year ending December 31, 1882.

Description.	Kilograms.	Value, including cost and charges.	Countries whither exported.
Indigo	33,117	$68,234	France.
Do	10,984	21,968	England.
Do	15,007	30,014	Germany.
Cattle hides	104,475	26,119	United States.
Do	23,002	5,751	Germany.
Kip skins	5,929	1,186	United States.
Do	149	30	Germany.
Deer skins	6,433	4,824	United States.
Do	311	233	Germany.
Brazil wood	555,000	11,000	United States.
Do	1,522,000	30,440	England.
India rubber	1,278	3,195	United States.
Coffee	21,480	4,296	Do.
Do	2,840	568	England.
Do	14,413	2,883	Germany.
Cigarettes	18	96	United States.
Hammocks	115	75	Do.
Eagle dollars	.....	1,000	Do.
Do	.....	2,000	England.
Total	.....	211,912	

Statement showing the navigation at the port of Salina Cruz for the year ending December, 31, 1882.

ENTERED.

Flag.	From—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
German	New York	.....	.....	.....	.....	.....	.....
American	San Francisco	1	2,144	2	619	3	2,763
Mexican	Fonala	.....	.....	1	28	1	28
German	Guaymas	.....	.....	1	396	1	396
American	Salvador	.....	.....	1	351	1	351
German	Brazil	.....	.....	.....	.....	.....	.....
	Rio de Janeiro	.....	.....	1	412	1	412
	Hamburg	.....	.....	4	1,682	4	1,682
	Falmouth	.....	.....	.....	.....	.....	.....
American	Acapulco	13	21,033	.....	.....	13	21,033
	Panama	12	19,017	.....	.....	12	19,017
	San Juan	3	4,484	.....	.....	3	4,484
Total	.....	29	46,678	10	3,440	39	50,118

Statement showing the navigation at the port of Salina Cruz for the year ending December 31, 1882.

CLEARED.

Flag.	To—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
German	New York	.....	.....	1	556	1	556
American	San Francisco	.....	.....	1	472	1	472
Mexican	Fonala	.....	.....	.....	.....	.....	.....
German	Guaymas	.....	.....	.....	.....	.....	.....
American	Salvador	.....	.....	2	175	2	175
German	Brazil	.....	.....	.....	.....	.....	.....
	Rio de Janeiro	.....	.....	.....	.....	.....	.....
	Hamburg	.....	.....	.....	.....	.....	.....
	Falmouth	.....	.....	6	2,236	6	2,236
American	Acapulco	12	19,017	.....	.....	12	19,017
	Panama	17	27,661	.....	.....	17	27,661
	San Juan	.....	.....	.....	.....	.....	.....
Total	.....	29	46,678	10	3,440	39	50,118

Statement showing the imports and exports between Salina Cruz and the United States for the year 1882.

	Imports.		Exports.	
	Amount, invoice.	Value, duties.	Amount.	Value.
			Kilograms.	
January	$3,379	$1,850		
February	2,083	741		
March	4,003	611		
April	63	2		
May	6,102	1,722		
June	437	24		
July	1,188	491		
August	644	231		
September	5,628	2,135		
October	6,110	489		
November	39,461	865		
December	2,164	478		
Hides			104,475	$26,119
Kip skins			1,186	5,929
Deer skins			6,433	4,824
Brazil wood			555,000	11,000
India rubber			1,278	3,195
Coffee			21,480	4,296
Cigarettes			18	90
Hammocks			115	75
Eagle dollars				1,000
Total	71,262	9,639	689,985	56,534

TEHUANTEPEC, *January* 31, 1883.

TRADE OF GUERRERO.

REPORT BY VICE-CONSUL WINSLOW.

I have the honor to present the following statement of the amount of importations and exportations to and from this city for the year ending December 31, 1882, as rendered to me by the Mexican custom-house collector here:

Place from whence imported or to where exported.	Imports.	Exports.
	Value.	*Value.*
Guerrero to Carriso		$76,172
From Matamoras and Laredo	$188,175	
From Carriso	208,098	
Total	396,273	76,172

The importations consisted of general merchandise, and the exportations of beef hides, goat, kid, and deer skins, horse-hair, and live animals. The greater amount of importations from Matamoras came from Europe, but those from Laredo all came from the United States. A small amount of goods have been exported by way of Laredo, the amount of which I have been unable to ascertain; neither could I obtain the values of different articles imported. The Mexican custom-house officials were unwilling to go to the trouble to give me the information.

The value of declared exports from this place, according to the invoices presented at this consulate, to which consular certificates were attached, amounted to only $42,306, while the value of declared exports

presented at the Mexican custom-house amounted to $76,172, showing a difference of $33,866.

This amount of goods must have passed either as contraband to the United States, or the owners of the goods did not present themselves at this office, in order to avoid paying the consular certificate. Probably the goods were passed as contraband, as I am not aware that the custom-house collector at Carrizo has permitted the entry of goods without the necessary consular certificate. If $30,000 worth of goods have been passed as contraband from Guerrero, how many thousand dollars' worth of goods have been passed from New Laredo, Camargo, Mier, Matamoras, and Reynosa? It shows that there ought to be an increased vigilance on the part of the United States custom-house officers.

CHARLES WINSLOW,
Vice-Consul.

UNITED STATES CONSULATE,
Guerrero, Mexico, March 12, 1883.

HOW TO INCREASE AMERICAN TRADE IN PERU.

REPORT BY VICE-CONSUL LAPOINT, OF LAMBAYEQUE.

Failure of the rice crop.—In summing up the commercial standing for the year 1882, I beg to state that the prospect of this consular district has been very gloomy on account of the almost total loss of the rice crop from the heat and scarcity of water, and this to such an extent that rice, which is generally sent from here all along the coast as far as Valparaiso, to the amount of 300,000 quintals, had to be introduced from India for public consumption, an event unprecedented in the agricultural annals of this district.

Sugar crop.—The sugar crop, which is certainly the principal source of riches, has likewise suffered from the same cause and by the difficulty of obtaining field laborers, these having almost all retired more to the interior to avoid the exactions of the Chilian forces occupying the littoral. This, added to the 50 per cent. tariff on invoices imposed by the Chilians, has made trade almost impossible.

HOW TO INCREASE AMERICAN TRADE.

In order to increase the commercial relations between the United States and Peru in general, it is absolutely necessary that a line of steamships, flying our flag, should run direct to the United States, these with good storage and low freights. At present there are four national lines of steamships direct to England, France, Spain, and Germany, and the greater part of Peruvian produce is carried by them, and returns are mostly in European manufactures, although the following American articles are preferred and command higher prices: Machinery, railway stock, agricultural implements, hard and hollow ware, watches and clocks, petroleum, canned goods, lamps, India-rubber goods, brown drills, light cotton duck, cotton goods, bleached shirtings, sheetings, brushes, and brooms. Prints, which are in great demand here, are an article which our manufacturers need studying. French and English are preferred on account of their breadth, a French meter, and for their assortment of colors, adequate to the taste of the

country, whilst ours are far from it. On one side the high tariff of the United States on sugar, cotton, and tobacco, the greatest product of this district, impedes the growth of commercial relations, and on the other, the principal merchants are English and keep on hand, as much as possible, only English samples

I certainly believe that trade with the United States would enliven, should our manufacturers take the pains of sending samples, catalogues, and price-lists to some responsible merchants, and I may indicate that many consuls are authorized to be merchants, and I believe that their official capacity is a guarantee for them, besides having good references in the United States.

It is my duty to indicate that great carelessness prevails with our manufacturers; for instance, I was called upon to purchase in the United States a steam-pump and boiler, which I ordered from one of our most famed manufacturers, and when it arrived, not alone was the boiler inadequate for the pump, but actually after two months' work the upper tube sheet split in three parts, a proof of its bad quality and construction. It was so small that it could never run the pump more than two hours at a time and then stop to get up steam. The whole valley of Chiclayo was waiting to see the efficiency of the pump which was used for irrigating, to order some like it. The consequence is that through sheer carelessness on the part of the manufacturers, the orders will go elsewhere. The greater part of the planters that order machinery lack a knowledge of mechanics, and give their orders detailing the work they desire the machines to perform, and I recommend that great care and attention should be paid to this point, and avoid by thorough inspection the sending of useless articles, such as the pump alluded to.

ALFRED LAPOINT,
Vice-Consul.

UNITED STATES CONSULATE,
Lambayeque, Peru, January 31, 1883.

TRADE OF LYONS WITH THE UNITED STATES.

REPORT BY CONSUL PEIXOTTO.

The exports from Lyons to the United States for the first eleven months of the year have been 65,991,496 francs; and, estimating the December exports at 4,009,004 francs, would make a total for 1882 of 70,000,000 francs.

For the past five years the exports from this consular district to the United States have been as follows:

	Francs.
1878	41,485,680
1879	48,339,844
1880	59,918,667
1881	61,876,732
1882	70,000,000
Total	281,621,393

Or, in United States currency, $54,352,929, showing a very steady and important increase from year to year. Of these exports silk manufactures have been:

	Francs.
1878	34,723,425
1879	39,168,158
1880	53,344,605
1881	49,836,397
1882 (say)	54,315,944
Total	231,398,489

The export of raw silk to the United States during the year, estimating 718,000 francs for December, has been 10,235,967 francs, a very large increase, being nearly a third of the total amount exported during the past five years, as will be seen from the following table:

Export of raw silk to the United States for five years.

	Francs.
1878	2, 901, 741
1879	6, 123, 619
1880	3, 782, 597
1881	8, 066, 965
1882	10, 235, 967
Total	31, 113, 069

The export of pierced cocoons was, for 1881, 494,009 francs; for 1882 (11 months), 1,418,840 francs; total, 1,912,849 francs.

Of waste silk the exports were, 1881, 432,016 francs; 1882 (11 months), 551,072 francs; total, 983,088 francs.

Of spun silk the exports for the 11 months ending November 30 were 81,129 francs; of silk gum waste, 11,000 francs.

These are interesting figures, and when considered in reference to the decline in the price of silk, which is probably about 30 per cent. would seem to show that Lyons continues to produce her usual quantity of goods.

Unhappily the state of trade during the year in England and on the continent, as well as in the East, has been exceedingly unfavorable, and seriously affected the Lyons exports to those countries. Month by month the work of the looms has been diminishing until within the last three months only from two-thirds to one-half have been employed. Such is the situation as the year closes.

The largely increased export of the raw material is a gratifying evidence, not only of the continued development of our home industry, but of the use by our manufacturers of a superior article of silk in the fabrication of their goods. I shall have the honor to report more fully upon the subject of the commerce and manufactures, &c., of my consular district in my report for January.

BENJAMIN F. PEIXOTTO,
United States Consul.

CONSULATE OF THE UNITED STATES,
Lyons, December 12, 1882.

FRENCH AND AMERICAN WHEAT.

REPORT BY CONSUL WILSON, OF NANTES.

I respectfully report the following state of affairs as having a bearing upon the wheat importations from the United States to France for the season of 1883.

Usually the rainy season begins in December; last fall it began in September. The rainfall at the observatory at Nantes is reported as follows:

Months, 1882.	Rainy days.	Rainfall, millimeters.
September	22	84.06
October	22	100.60
November	28	137.13
December	25	72.55
For 4 months	97	394.34

The total rainy days of the year were 215, and the rainfall 783 $\frac{19}{100}$ millimeters It is estimated that this rain area has extended over about one-third of France. The immediate result is that but little wheat has been sown and that little has not sprouted. Unless the farmers should succeed with spring wheat better than can at present be expected, the wheat crop of 1883 in France will be a comparative failure, of which American grain shippers would do well to take notice.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, January 17, 1883.

THE IMPORT TRADE OF LEITH.

REPORT BY CONSUL LEONARD.

IMPORTS FROM THE UNITED STATES.

Hog Products.—The trade in hog products from the United States during the past year has been limited, by reason of the high prices ruling there.

Cheese.—The sale for American cheese was slow throughout the year, and at its close prices obtained in Leith were fully $2.43 lower than what could be had in America, the highest price here being $15.09, while the American quotation was $17.52. At same time the prices quoted in Liverpool were $16.06 and $16.55. During past year 387,472 cheeses were brought by steamer to Leith and Granton. In 1881 the number was 349,350.

Butter and Butterine.—The trade in butter has been a dragging one, which, to a great extent, may be accounted for by the large imports of butterine. Upwards of 100,007 packages of Danish, Kiel, and Swedish butter arrived during 1882, as compared with 71,160 packages in 1881. The arrivals of Dutch butterine increased from 102,557 packages in the year 1881 to 206,077 in 1882.

The above figures do not include the quantities of cheese, butter, and butterine brought here by rail, in regard to which no statistics are available that can be relied on.

GENERAL IMPORTS.

Steam fleet.—With reference to general imports Messrs. Currie & Co., of Leith, have a fleet of twenty steamers engaged in trading between this port and the continent of Europe and coastwise, with a tonnage of about 16,000 tons, as many as six of those vessels being in the Hamburg trade at one time.

Sugar imports.—A special feature in this trade has been the large imports of sugar to Leith. During 1882, from 40,000 to 50,000 tons were brought hither, most of which was thereafter sent by rail to Greenock and the sugar refineries elsewhere in the west of Scotland. Contrasted with 1881, the importations of refined sugar during past year exhibit a total increase of between 4,000 and 5,000 tons, but raw sugar shows a decrease of about 10,000 to 15,000 tons. However, 1881 was by far the heaviest year in the imports of that article ever known at Leith. During that year some of the German beet sugar factories

consumed from half a million to a million and a half cwts. of beet-root in the manufacture of sugar, and their business was exceptionally profitable, many of the factories paying from 30 to 40 per cent. dividend.

The reaction, combined with larger quantities shipped direct to Greenock, has naturally caused a decrease in the imports of sugar at Leith.

General merchandise.—As illustrating the nature of the enormous quantities of goods landed at this port from Hamburg free of duty, it is deserving of mention that a manifest of one cargo, taken at random, includes waste salt, grass seed, woolen and cotton yarns, toys, paper, flour, mustard, vinegar, glass, glucose, hops, farina, albums, musical instruments, china, spelter, plates, colors, butter, cucumbers, rubber-ware, woodware, yeast, brassware, cotton shawls, and moldings.

Cattle imports.—There is a marked falling off in the importation of cattle from the continent of Europe, though a number of large consignments have been brought direct from Malmo, which were formerly taken overland to Copenhagen for shipment by Messrs. Currie & Co.'s steamers.

Peat moss.—Extensive arrivals of turf or peat moss, brought by steamer from Bremerhaven, have supplied a new feature in the continental trade. The material is compressed into neat bales, and has come rapidly into use for horse-bedding purposes.

Hungarian flour.—In the importations from Hamburg, flour bulks very largely, a considerable quantity of Hungarian flour being sent by canal and overland from Austria-Hungary to Hamburg for shipment to this country. Hungarian flour, it is said, is stronger than the home article, and is in great demand for mixing purposes. Formerly a cargo was brought direct now and again, but as a rule the flour was sent to Hamburg for shipment, which added materially to its cost in the markets here. However, within the past eighteen months a Glasgow firm started a regular line of steamers to trade between Fiume and this country, and the Hungarian Government subsidized the company. Most of the flour conveyed in those vessels is brought to Leith, Glasgow, and Newcastle. At Leith about 130,000 sacks of the flour have been landed during the past year.

American flour.—American flour has also arrived in large quantities from New York to Leith by the Arrow Line steamers.

Flour and grain imports.—The imports of flour and grain into Leith and Granton have been as follows:

Articles.	1882.	1881.
Flour.....sacks..	333,494	470,089
Wheat.....cwts..	1,329,186	1,313,911
Barley.....do...	808,032	866,120
Oats.....do...	492,124	168,138
Beans.....do...	114,210	38,589
Pease.....do...	147,596	82,544
Maize.....do...	156,816	416,213
Rye.....do...	54,292	23,000
Tares.....do...	8,133	3,967

Esparto grass.—The importation of esparto grass, both by steamers and sailing vessels, is another important trade which has assumed large dimensions. About 29,000 tons of this material arrived at Leith from Oran, Sfax, Carthagena, Algiers, and other ports during 1882. The grass is closely pressed in bales, and is discharged with such celerity that in some instances 150 tons have been landed from one vessel in a

day. As many as four and five vessels laden with esparto grass are sometimes discharging at one time in the docks at Leith.

Lumber imports.—The quantity of lumber imported at Leith during 1882 was considerably greater than that of previous year, although somewhat below the imports of 1880, which were unusually heavy. By reason of the large imports during 1880, the stocks held at the beginning of 1881 were very great, and a severe and long-continued winter having stopped building operations for a considerable time, the imports during that year were less. At the close of 1881 stocks were in moderate compass, and the winter being comparatively mild more lumber was used than during previous year. In 1882, with improvement in trade generally, larger purchases were made. Such improvements, however, did not extend to the building trade in this district, on which the lumber trade depends very much for its prosperity. At the same time the great bulkiness of the shipbuilding industry maintained the demand for certain kinds of timber. Such was specially the case with regard to Quebec yellow-pine timber, the importation of which was restricted in consequence of its extremely high price. Stocks at Quebec are again reported light, hence the high prices may be maintained for a time. The prices of Baltic timber of all descriptions are very moderate.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, January 31, 1883.

AMERICAN SECURITIES IN HOLLAND.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

In a report I made on this subject about a year ago, the facts were mentioned that a considerable decline in the prices of American railroad stocks took place during the latter half and at the close of the year 1881; that during the months of January and February of 1882 the market was even still more depressed, and that matters generally were looked upon as portending more than merely a passing fluctuation of the price or value of such securities, but rather as the beginning of a period of settled or fixed reaction.

Whilst thus the prospects for extensive and profitable transactions for 1882 were far from promising, they were not altogether so discouraging as to shut out all expectations of a change for the better in the then near future. At all events, such expectations, whether justified or not, were largely indulged in, but doomed to be surely disappointed.

As the year progressed, affairs constantly went from bad to worse, and this not only respecting losing operations in American railroad stock, but fully as much, if not even more so, as concerning transactions in European securities of many descriptions.

The political horizon of Europe was hardly at any time during the year without some signs causing disquietude and uncertainty in financial circles and in the stock market.

The ever existing "Eastern question," intensified in 1882 by its culminating in a war between England and an Egyptian army, and various other political events of more or less importance, contributed here, as everywhere else in Europe, to this almost constant state of agitation on the stock market.

The financial crash in Paris, owing, apparently, to senseless overspeculation, the downfall of the Union Generale, and other large bank-

ing institutions in France, also had its injurious effect. The indirect consequences of occurrences such as above alluded to, and of still other untoward circumstances, entailed continued and heavy losses to many capitalists, speculators, and investors in this country.

Great confidence in American railway and other enterprises has long since become established in Holland despite occasional checks on account of the introduction and placing in its markets some years ago of millions of dollars worth of securities, at high rates, covering enterprises of only too doubtful a character, as was subsequently proven, to the great injury of investors here. However, under anyways favorable conditions the Dutch people remain more than inclined to continue to invest in certain of our securities. The past year's transactions would seem to furnish the proof of this. Notwithstanding that a great deal of money was lost here in American railroad securities during the latter part of 1881 and in the early part of 1882, still, under prevailing circumstances, particular attention of capitalists and others here was again directed to the United States. What seems particularly to attract their attention to our country, with a view of investments therein, is considered to be the comparative immunity of the United States from external political complication of any such character as at any time to justify apprehensions for the preservation of almost perpetual peace. When considering the situation of the United States in this respect, in contradistinction to European countries, no one, they say, and wisely so, can fail to observe the great boon and advantage our country enjoys. The further and important facts of our country's almost exhaustless resources, and its ever increasing means for their development, are also fully understood and taken into account. The natural result of this was that in the course of the year the holding of American railroad securities, especially shares, again considerably increased, being then purchasable at more or less lower figures from former quotations. This, however, does not refer to any new sorts of shares or bonds, excepting in one or two instances, but to such as had been introduced and were dealt in before in this market, and consisting more particularly of shares of the following companies: Denver and Rio Grande; Wabash, Saint Louis and Pacific; Louisville and Nashville; Buffalo, Pittsburgh, and Western, &c.

At one time, but only as it were for a moment, it appeared that, through the largely augmented investments and transactions in American railroad shares, the already sustained great losses in American and European securities might in a measure be again recovered or made up. But this was not to happen; on the contrary, the favorable indications for a continued or sustained rise in prices soon disappeared again, and thenceforth to the end of the year and up to the present a downward tendency ruled the stock market, and further great losses resulted. This state of things causes, and very naturally, renewed disappointments and gives rise here to occasional severe criticism.

There are not wanting those who believe and claim that it is owing in a great measure to the unrestrained power and influence in the hands of certain parties in the United States, which they have used and do use for their personal aggrandizement, and in such manner as thereby to prevent the many natural advantages of our country from exerting themselves and working out as it were their own results, which could only be beneficial as respecting our vast railroad interests and the value of securities.

Another noteworthy circumstance consists hereof, that during the year 1882 the Dutch public largely increased their holdings of American railroad securities by investing almost exclusively in shares instead of

in bonds, as was formerly more generally the case. These shares having since then depreciated in value and bearing no interest, makes their losses to be so much greater, and weakens and reduces present transactions. On the whole it may safely be stated that the national wealth of the Netherlands suffered a considerable diminution in 1882. The losses sustained from the very large possession by its people of securities of many descriptions contributed to this unfortunate result, but, as represented to me, it is more chiefly on account of the recent and great depreciation in the value of all kinds of real estate throughout the country, and the rather unfavorable outcome of the general commerce and trade of the past year.

Dealings in United States bonds have about ceased here, but 4½ per cents (1876's) are to an inconsiderable amount still held; so are some continued 4 and 5 per cent. bonds still left here. They are, however, gradually finding their way back to the United States.

In concluding this report I would remark that the statements it contains are based more especially upon information received from parties intimately acquainted with the subject than upon my own observations or knowledge of the same.

I subjoin hereto a tabular statement showing the rates of exchange at Amsterdam in 1882.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, February 28, 1883.

Rates of exchange at Amsterdam in 1882.

Months.	Paris, per 100 francs.		Hamburg, per 100 reichsmark.		London, per pound sterling.	
	At sight.	Two months.	At sight.	Three months.	At sight.	Two months.
	Florins.	*Florins.*	*Florins.*	*Florins.*	*Florins.*	*Florins.*
January:						
Lowest	47. 80	47. 30	58. 95	58. 35	12. 05	11. 95
Highest	48. 27½	47. 50	59. 20	58. 45	12. 13½	12. 01
February:						
Lowest	48. 00	47. 40	59. 00	58. 35	12. 12½	12. 00
Highest	48. 27½	47. 50	59. 20	58. 50	12. 14½	12. 02
March:						
Lowest	47. 80	47. 40	58. 85	58. 40	12. 06½	12. 00
Highest	48. 02½	47. 55	59. 15	58. 50	12. 13½	12. 03
April:						
Lowest	47. 75	47. 40	58. 75	58. 30	12. 05	11. 98
Highest	47. 87½	47. 45	58. 95	58. 35	12. 07	11. 99
May:						
Lowest	47. 80	47. 40	58. 70	58 25	12. 03½	11. 96
Highest	47. 95	47. 50	58. 80	58. 45	12. 06½	12. 00
June:						
Lowest	47. 95	47. 50	58. 80	58. 45	12. 06½	12. 00
Highest	48. 07½	47. 55	59. 10	58. 55	12. 10	12. 03
July:						
Lowest	48. 00	47. 50	58. 95	58. 45	12. 07½	12. 02
Highest	48. 12½	47. 55	59. 05	58. 55	12. 11	12. 04
August:						
Lowest	48. 10	47. 50	59. 00	58. 35	12. 07½	12. 00
Highest	48. 17½	47. 60	59. 25	58. 60	12. 14	12. 05
September:						
Lowest	48. 00	47. 60	59. 05	58. 50	12. 13½	12. 04
Highest	48. 20	47. 60	59. 35	58. 60	12. 15	12. 05
October:						
Lowest	48. 02½	47. 60	59. 25	58. 50	12. 12	12. 02
Highest	48. 10	47. 60	59. 40	58. 60	12. 14½	12. 04
November:						
Lowest	47. 92½	47. 60	59. 25	58. 50	12. 09	12. 00
Highest	48. 05	47. 60	59. 35	58. 60	12. 11	12. 02
December:						
Lowest	48. 00	47. 50	59. 25	58. 50	12. 09	11. 99
Highest	48. 05	47. 60	59. 42½	58. 60	12. 11½	12. 01

FALSE TOBACCO-PACKING.

REPORT BY CONSUL LEWIS, OF SIERRA LEONE.

I have the honor to make the following report regarding leaf tobacco imported here from the United States, upon which report I base a complaint, in the hopes that some remedy may be afforded.

According to the customs report, there were imported here in 1880, 993,653 pounds leaf tobacco, valued at £26,799, on which duty was paid amounting to £15,036. In 1881 there were imported 881,890 pounds tobacco, valued at £15,717; duty paid, £14,698.

This tobacco is all imported from New York and Boston by three houses, viz, an American, a French, and an English house, and sold to the tobacco traders by inspector's sample accompanying each hogshead.

I have known of my own personal knowledge during a residence here of nearly five years that American leaf tobacco in hogsheads (Kentucky) is *dishonestly packed*, or *dishonestly inspected*, or *both*, in not being according to samples in quality, length, and color, occasioning great loss to the importer; for no sooner is it sold, duty paid, and taken to the retailers' shops and opened than a complaint comes of tobacco being bad. The merchant goes and inspects it, and finds large quantities of very short leaves and inferior tobacco, and some hogsheads contain from one to six bagsfull of refuse tobacco that will not sell for half enough to pay the duty, and an allowance has to be made by the importer, varying from 25*s.* to £12 sterling per hogshead.

It is not an easy matter to inspect a hogshead of tobacco by drawing or cutting a single stave and ascertaining the true inwardness of the thing; it is not until it has passed through all of the stages above mentioned, viz, imported, sold, duty paid in cash, removed from the bonded warehouse, taken to the retailers' shops, and, after much labor and trouble, got into position in a small place and opened, and then the tobacco torn up, that we can see exactly what its true condition is. The duty is now paid, and cannot under any circumstances be recovered; so there seems to be but one of two things for the importer to do—either take the tobacco back, which would occasion much annoyance and very great loss, or make the purchaser an allowance, which varies, as above stated, from 25*s.* to £12 per hogshead.

Now, so far as I am informed at present there seems to be but one chance for the importer, and said chance is, practically speaking, almost worthless, viz: If tobacco is not according to sample, have a survey held, and have the report of survey certified by the consul, and return the tobacco with the survey report to the United States, and then trust to time and fortune for redress.

I say practically this is a dead letter, for rather than encounter this expense, trouble, and uncertainty, the importers have been making allowances year in and year out, until now they are tired of it, and appeal to me to know if nothing can be done to remedy this growing evil.

I have made inquiries on the subject to ascertain the facts in the case, and the following is what one firm writes me:

In reply to your letter of the 1st instant, I beg leave to inform you that two-thirds at least of the hogsheads of tobacco we have received up to this day from America

were not according to samples, and that it has become such a nuisance for us, as well as for our customers, that strict orders have been given to our agents in America not to receive any hogsheads of tobacco without having it opened and compared with the samples. In some hogsheads of tobacco we have found, packed up in the middle, some very short leaves, quite loose and mostly rolled up, of a quality quite unfit for sale or even presents.

Another house reports constant complaints from customers and asking for allowance. One vessel bringing 50 hogsheads tobacco was obliged to make an average allowance of £2 per hogshead for entire lot.

Another house reports as follows:

In reply to your letter, dated 1st instant, we beg leave to inform you that about 25 per cent. of the tobacco we have been importing from the United States is unlike the samples, and in our last two shipments it was more than 50 per cent. The allowance we are obliged to make on such tobacco would be £2 sterling per hogshead.

As I have already said, it is difficult to inspect a hogshead of tobacco and judge accurately of its quality, &c., without entirely removing the hogshead from around the tobacco, and not even then, so ingeniously is the deception practiced by the original packer. Again, after a hogshead is opened and a portion of the tobacco sold, the hope is entertained that it may prove better the lower down they go, until finally it is too late for a survey and a return of the entire hogshead to the United States. I would therefore earnestly recommend that the authorized and sworn inspectors exercise far greater care in their inspections, and also for the passage of a law providing for a consular inspection of tobacco exported from the United States to foreign countries which proves inferior and unlike the samples, whereby the exporter should be held responsible for the actual loss incurred, in which case, of course, he would hold others responsible; and one year of this practice would, I think, greatly improve the packing and inspecting of leaf tobacco for export.

This loss has become a serious tax upon the importer, even, in many cases, taking nearly or quite the entire profits.

I would also earnestly recommend that uniform lengths of leaves be packed in the same hogsheads, long leaves, medium, and short, all separate, and not, as now, all mixed in same hogsheads, as the trade is so peculiar; some want long leaves, and short leaves are no use to them, while others require shorter tobacco, according to their location and the peculiarities of their special trade.

As the tobacco sent to this port is selected from a large quantity packed and inspected the same as this is, no doubt the complaint which attaches to this will also apply to the entire lot, thus comprising a wholesale fraud, of which the importer who buys is the victim, for he has to warrant according to sample or make the deficiency good by a cash allowance.

It would seem from the foregoing that the entire tobacco production of the United States packed and pressed in hogsheads will require at least *five dollars* to each and every hogshead to make up the quality equal to the sworn samples.

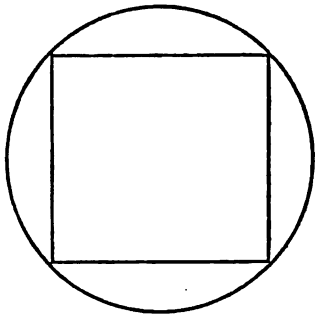
JUDSON A. LEWIS, *Consul.*

UNITED STATES CONSULATE,
Sierra Leone, January 15, 1883.

SUPPLEMENTARY REPORT ON FALSE TOBACCO PACKING.

BY CONSUL LEWIS, OF SIERRA LEONE.

I have the honor to offer as supplementary to my report on tobacco, as given in dispatch of January 15, 1883, to the Department, the following important fact, with accompanying diagram, as received from New York merchants who have been exporters of leaf tobacco to Africa for years. The facts as reported by the said merchants, and which they have but recently learned, are that in packing leaf tobacco in hogsheads it is always packed up in squares from top to bottom of hogshead, as represented in the diagram, thus:



The four spaces between the hogshead and the square are filled in with short leaves, scraps, and refuse tobacco generally; also from 2 to 6 inches in depth all over the upper surface in the head-end of hogsheads the same poor tobacco is put, and that in the inspections no account is taken of this refuse, only the central and good tobacco being drawn from four places.

I lose no time in sending you this information, which I have reason to believe true, coming from the source it does, in hopes the Department may make investigation, and if found true take measures for its correction, for so gross an outrage it would seem ought to be at once exposed and remedied.

The above tends to account for the results as complained of in my report of January 15 last, and for which I recommended some necessary legislation.

JUDSON A. LEWIS,
Consul.

UNITED STATES CONSULATE,
Sierra Leone, February 26, 1883.

RUSSIAN VS. AMERICAN PETROLEUM.

REPORT BY CONSUL-GENERAL HEAP.

I have been informed by the United States consular agent at Trebizonde of a dishonest practice of merchants dealing in Russian petroleum in the interior of Asia Minor which will probably cause some prejudice to that imported from the United States. As it is, however, a virtual

acknowledgment of the superiority of the American oil, the prejudice will probably cease as soon as the fraud is made publicly known. The consular agent states that these merchants collect the empty cans and cases which have contained American petroleum and whose marks are familiar to the trade and to consumers, fill them with the inferior Russian oil, and send them into the interior.

Although the Russian oil is cheaper than the American, it cannot compete with it in the market on account of its poor quality, but by means of this fraudulent use of the well-known marks of American firms they are not only able to sell theirs but to sell it at a better price, and it has the further effect of injuring the fair and well-earned reputation of the American oil.

I have instructed the consular agent at Trebizonde to enter a protest at the custom-house against this illicit practice, and to make it as widely known as possible, and I would respectfully suggest that it might be well to inform the rectifiers and exporters of petroleum in the United States of this practice, as they may be able to devise means to render the use of their cases and cans a second time for petroleum impossible without detection.

I have made inquiry at the Russian consulate-general here to ascertain the quantity of petroleum imported from Russia since the opening of this trade, but they could not or would not give any information on the subject, but I can state that the amount is inconsiderable. It is brought in small vessels carrying from 250 to 600 cases, and does not find a ready sale here, on account of its inferior quality. Two vessels with cargoes of over 7,000 cases each have passed down from the Black Sea bound to Mediterranean ports.

The business of refining petroleum in the Bakow region of the Caspian Sea is still in its infancy, but the company which has obtained the concession from the Russian Government has a large capital and owns a numerous fleet of steamers and sailing vessels on the Caspian. It employs men of high scientific attainment and experience to improve the process of refining their oil, and in facilitating and economizing its transportation to the Black Sea ports.

A railroad has been completed from Bakow to Tiflis, whence a road has been in operation to Poti, on the Black Sea, for several years. Poti and Batoum, a port ceded by Turkey to Russia by treaty in 1878, are also in railroad connection.

With these advantages the Russian petroleum company has facilities for supplying Turkey with which the American companies cannot compete, and it counts confidently upon securing the monopoly of the trade in the Asiatic provinces when it has succeeded in perfecting its processes of refining. Although they can undersell American petroleum, the superior quality of ours saves it for the present from being driven from the market in Asia Minor. The quantity and value of petroleum imported at this port from the United States in the last three years are as follows:

		Value.
1880:		
Cases	164,980	$248,351 75
Barrels	900	4,493 07
1881:		
Cases	437,918	690,895 58
Barrels	6,411	32,042 04
1882:		
Cases	523,186	711,008 62
Barrels	3,119	15,571 02
Total		1,702,362 08

The number of vessels which have arrived here from the United States loaded with petroleum during the same period is as follows: Austrian, 20; English, 2 (one steamer); Greek, 1; Italian, 49; Swedish-Norwegian, 4; total, 76.

No vessel under the American flag has arrived here with petroleum since 1878. Two came in that year. The average cargo of the sailing vessels was 15,098.72 cases and barrels. The English steamer landed 12,360 cases here and about 40,000 at different ports of Greece and Salonica.

If Russian traders have recourse to illicit and fraudulent practices to find a sale for their goods it is an indication that they cannot as yet compete by fair means with the American. Should they, however, be able eventually to produce as good an article as the American, there is no doubt that their competition will be fatal to our trade here, as with the facilities they possess for economical transportation they will always be able to undersell us.

Roumania is also in the market with her petroleum, but its quality is inferior even to the Russian, and it is weighted with fiscal regulations which give their product small chance of success by the side of the American even in their home market. Their tin is imported from abroad, and pays a heavy duty, upon which no drawback is allowed when re-exported.

It is to be hoped that our refineries will keep up and even improve the standard of their oil, for if they allow themselves to be distanced by the foreign refineries, this important and steadily increasing article of importation will lose the command of the Mediterranean markets it has so long and successfully maintained.

G. H. HEAP,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Constantinople, February 23, 1883.

AMERICAN COTTON IN ITALY.

TRANSLATION OF A LETTER FROM GENOESE MERCHANTS CONCERNING AMERICAN COTTON, TRANSMITTED TO THE DEPARTMENT OF STATE BY CONSUL HALELTON.

At the request of the United States consul the undersigned merchants and owners of cotton-spinning factories at Genoa declare: That for several years they have not purchased the cotton of America with the same confidence as formerly, and that the following are the reasons thereof:

Quality.—They seldom find a cotton bale all equal (even-running). Although they take the sample from two sides, they are not certain to have verified the quality. They often find some bale arranged with art, with an inferior quality of cotton in the middle.

Moistness.—Many lots of bales as soon as opened have a sharp musty smell, caused by having been made with damp cotton. This causes a diminution of weight when dry of 2 or 3 per cent. on receiving the goods, and a diminution very much larger when the cotton is in the spinning-mills and when it is left some time in the stores. This moistness is often so large that it hurts the quality of the cotton. The cotton merchants think this moistness is given designedly, because they receive at the same time parcels of cotton in good condition together

with parcels damaged, parcels lacking very much in weight with parcels of correct weight.

Earth or sand.—The shippers often put within the bales a certain quantity of cotton mingled with earth, which in some cases may be the sweepings of the stores, but oftener it is put there designedly. Some pounds of sand or seeds are often found in the corners of bales.

Average.—Often, and especially in the lots of cotton sent after March, some entire parcels are found damaged before being shipped. Evidently the bales are left in an open place, because, generally the side of the bales damaged is that touching the ground.

Bandage of the bales.—It is much neglected, and often thin and old bandages are used which are not strong enough. Therefore a great deal of cotton is lost while being landed, and it requires an expensive work of the packers here in mending the bales. There are also some bales bound with very heavy bandages and iron rings in order to make a weight much heavier than usual tare.

All these causes contribute to give to the American cotton a value inferior to that which it could have, and often the East Indian cotton is preferred to it because that has not the objections aforesaid. In short, it will be for the interest of the American cotton planters that, 1. Every bale be made with cotton of the same quality (even-running). 2. That the cotton be not moister than it naturally is. 3. That it be kept in covered stores. 4. That the bales be bound with strong bandages and iron rings, but not heavier than the usual tare.

FRANCIS SCIACCALUGA & SONS.
FIGURI & DEFERRARI.
JULLIO CARLO GIO. & N^lo GERARD.
STEFANI SCIACCALUGA.
FIGARI & FERROL.
FIGARI & BIXIO.

CONSUMPTION OF AMERICAN MEATS IN GERMANY.

REPORT BY CONSUL FOX, OF BRUNSWICK.

I have the honor to inclose an article with translation which I take from the Magdeburger Zeitung of January 12.

It is not in my province to even refer to the political reasons which the Government had for proposing the prohibitory measures against American meats. It must, however, be very satisfactory to our exporters to note that the result of the discussion has been to bring forth indisputable evidence of the fact that American pork is an absolute necessity in Germany, and the statement coming from such a recognized authority as Professor Virchow must carry conviction that the German health is not jeopardized by partaking of it.

WILLIAM C. FOX, *Consul.*

UNITED STATES CONSULATE,
Brunswick, January 15, 1883.

[Translation from the Magdeburger Zeitung, of January 12, 1883.]

The following letter from Iserlohn received by a delegate* on the day following the debate, in regard to the measure prohibiting the importation of meats has been handed us and we publish the same as supplementary to the discussion in question.

* Of the Imperial Parliament.

"In our mutual benefit store in this place, whose business manager I am, we have for the past ten years kept American bacon in stock, during which time we have sold some 300,000 pounds. In the other local business establishments about 700,000 pounds have been sold and not one single case of trichina has occurred. A prohibitory decree would rob the workman of a good, healthy, and thereby a cheap nourishment. Three years ago the then newly imposed duty had the effect of greatly increasing the price. Before the introduction of the duty I bought American bacon for 34.35 pfennig per pound; Westphalian bacon for 45.50 pfennig per pound; to-day the same costs: American bacon, 62 pfennig per pound; Westphalian bacon, 84 pfennig per pound. We formerly sold 1,500 to 2,000 pounds; to-day only about 500 pounds monthly. A prohibitory measure would simply so increase the price of Westphalian bacon that it would be an impossibility for the workman to purchase this healthy article of nutriment."

* * * * * * *

It is of great importance that Professor Virchow, who is the recognized best authority upon the subject of trichina, is against the prohibition. He says that with absolute certainty he has not been able to find one case of trichina caused by American bacon or ham, and that he only has heard of one, viz, in 1874.

"It appears that the American trichina loses its injurious properties through smoking, salting, pickling, and especially through the long journey.

"This fact has been certified to by Dr. Schulze, Government medical counselor in Minden. In his report for the year 1880, he says:

"'The assertion that the trichina loses its infectious properties through transportation, smoking, and salting must certainly be maintained, since, notwithstanding the presence of trichina, no case of illness from partaking of such meat has been recorded.'"

AMERICAN PORK IN GERMANY.

REPORT BY COMMERICAL AGENT WAMER, OF DÜSSELDORF.

The speech delivered in the German Imperial Diet at Berlin on the 10th of this month by one of its distinguished members, Herr Eugen Richter, a representative from the district of Hagen, Westfalen, is so strong in its plea against the passage of a decree, by the German Government, prohibiting the importation of American hog meat and its products into the German Empire, that I have thought it important to furnish the Department of State with a translation of the same. It is also based on similar protests against the prohibition of the importation as contained in my dispatch No. 31, transmitted recently to the Department.

WM. D. WAMER.

UNITED STATES COMMERCIAL AGENCY,
Düsseldorf, January 20, 1883.

MR. RICHTER'S SPEECH.

[From the Koluischen Zeitung.—Translation.]

GENTLEMEN: The interpellation is offered in the interest of the population of extensive districts. As a representative of the people of the district of Hagen, who are greatly interested in this matter, I support this interpellation.

On the 21st of November last year proposals were made to the German Federal Council, by the imperial chancellor, to issue a prohibition against the importation of American pork and its products into the German Empire. This prohibition will cut very deeply into the food supply of the population, inasmuch as there are many hundred thousands of centner that will be affected annually by this prohibition of the importation.

It was no later than the year 1880 that the Federal Council issued a decree in reference to the importation of American sausages and hacked meat in which it was expressly prescribed that the importation of whole hams and sides would be permitted. Now the imperial chancellor bases his proposal in the Federal Council upon the un-

healthfulness of the products of American meat, particularly of the hams and bacon But since the year 1880 nothing has become known to either the consumers in these districts that has given cause for any complaint against the use of American hog meat on account of its unwholesomeness, or to the officials in those communities, whose official duty it is to examine into everything that is supposed to be injurious to the health of the people, where the American products are generally enjoyed.

Some few years ago the scientific commission of the Prussian ministry for sanitary affairs also declared itself against such a prohibition.

Since the other petitions to the imperial chancellor have become known, which have been presented at the request of various agricultural societies, aiming at such a prohibition of American products, the memorial of the imperial chancellor to the Federal Council first proves that the injury to health of these articles are by their producing the trichina disease, and secondly, by the cholera among American hogs.

In reference to the trichina disease, the memorial says that the danger from the eating of American hog meat is at least six times greater than from the eating of the home products.

I will not go into the particulars from which this conclusion has been drawn, since the simple question is this: If of these articles hundreds of thousands of centner are annually consumed, and that thereby the danger is six times greater than with the domestic ones, where are the sick, where are the dead, which in consequence of this quality of the American hog meat we have to complain over?

The memorial of the Federal Council simply says: Undoubtedly diseases have been declared by the control at the places of import, in Germany, in consequence of the eating of American hog meat. The memorial does not make the slightest attempt to specify in numbers a single case.

* * * The superior medical adviser (*obermedicinalrat*) Eulenburg, who imparts his advice in the ministry of the interior, and who is a distinguished authority in sanitary matters, quotes from a report made by him in 1881 the cases where sickness and death have occurred, and I hereby declare that in all these cases not a single case of sickness or of death can in any way be attributed to the diseased condition either of the American or German hams and bacon. [Hear! Hear!] There are but two cases of sickness given as having been produced by sausages, and there is no proof indicating that American import products were in any way concerned in it.

The chief causes of the trichina disease have been in consequence of the eating of hacked raw meat, and the three cases there noted are much more important than all the rest of the diseases together.

On the ground of these experiences the eating of hacked raw hog meat could be forbidden, but not the importation of hams and bacon, which play no part in these statistics.

Now, I have conversed with my friend Virchow [the great German pathologist] concerning this matter. He is known for his strict demands, which he chiefly places on the police sanitary board, and, again, through the great attention which he has given from the beginning in the investigation of the trichina disease. He is in certain circles of the butchers and slaghterers one of the best interested and most hated of men. My colleague, Virchow, has authorized me to declare that he considers this prohibition of the importation in no manner justified. [Hear! Hear!] He says he has investigated this matter very thoroughly, and has taken the greatest pains, and up to the present has not been able to find out but one case, and that was in the year 1874, that is eight years ago, in which the trichina disease was produced by the eating of the American hog meat.

A valuable testimony is furthermore the report of a consume association, which states that the association had ordered in one year in its district 212,200 kegs of American hog meat, and that not one single case of sickness has occurred, although, according to the usual calculation, 4,704 purchasers have received bacon containing trichina.

If on the one side it is acknowledged that there exist in a comparatively large number of the sides of bacon trichina, and upon the other side none, or only single cases of sickness can be proved, then the conclusion is evident that in consequence of the salting, pickling, smoking, the long transportation, and in general the whole manipulation to which this article is subjected previous to its being placed on the market, the trichina are either no longer living or no more in condition when they reach the human organism to produce in any way dangerous effects. This conclusion is confirmed by a statement of Dr. Schütz, Government medical adviser at Minden, in whose district a large part of the investigation of American bacon has been made, who says:

"The assertion that the trichina which appear in great masses in American prepared meats have lost, through the manipulation to which they are subjected, their power of reproduction in the human system must still be maintained; that notwithstanding the enormous consumption of these meats there has not been a single case in which the sharpest kind of a diagnosis has revealed the presence of trichina."

In the face of this statement one may better conclude that the investigation of American hams and bacon is superfluous rather than its being insufficient.

Nevertheless, I will make no objection against the investigation of American bacon and hams, through official inspectors. It may be necessary to satisfy the consumers, and to the rejection of bacon that is more or less objectionable.

But when it is said that among the examined bacon are so many trichina, it may rightly be said that this investigation of the American import is much easier than the investigation of hogs butchered in Germany, for these are scattered over the whole country, while the importation comes *en masse* only from certain places, and where the regulations for the investigation are at hand. * * * Now, the memorial continues:

"Yes, even if the American bacon should be examined at the port of entries it would still be difficult to destroy the rejected bacon in a manner to prevent contagion; dogs, rats, and mice could transmit the trichina."

Yes, gentlemen; when that is possible here, it is also possible in reference to trichina found in the rejected German bacon, and then we come to the point of the Mosaic rule (very true), for dogs, rats, and mice make no distinction in regard to their appetite whether the rejected meat is American or German.

In regard to the second ground for the prohibition of importation, namely, the cholera, the memorial does not say that such a case has occurred in Germany at all; only in England live hogs have been introduced which had been infected with the disease, and the English ordered them to be killed immediately after their arrival.

The English, therefore, are satisfied with this police order; with us, where no such cases have come to light, a general prohibition of import is at once ordered.

Years ago the Secretary of the Department of State had taken occasion to institute a formal *enquete* in reference to the cholera disease, and appointed the director of the Bureau of Statistics to make the investigation.

The American Government had the results of this investigation published and forwarded to all their diplomatic agents in foreign countries. It maintains that all the American hogs are of the best and purest breed; that the reports spread in Europe concerning the disease of American hogs in consequence of the hog cholera is greatly exaggerated; that the percentage of death among American hogs is not any greater than in Europe; that of the American hogs which die of cholera in consequence of the strictest investigation and inspection to which they are subjected no diseased ones can be sent abroad, and that out of the meat of such hogs no bacon nor lard can be prepared for the trade.

One should think when a government prepares such a memorial as this that proper notice should by all means be given to the investigations of the American Government. But what does the imperial chancellor do? He creates the impression that the memorial of the American Secretary of State had been written in the year 1882, and says nothing else concerning its contents save only that "the results of the *inquete* form a comparatively valuable material, but calls attention to the fact that these compounded reports are neither complete nor sufficiently reliable for a control. Official proceedings to confirm these declarations by oath as bound by law have not taken place.

Yes, gentlemen, neither have they taken place with us. One should think that if the imperial chancellor utters such positive judgment in regard to the official *inquete* of the United States he would have greater reason to produce on his side truthful and complete statements of impartial men.

As proof of the proportion of the disease of American hogs a paper of an official American stenographer is mentioned. The imperial chancellor puts, then, against the Secretary of State of the United States a stenographer of New York! I do not know what stenography has to do with this question. Has that man been ordered when he hears complaint about hog meat to stenograph the same? He appears as a man who at times is employed by authority for stenography, and who has been ordered to put his name on a pamphlet which is put together out of various articles from a New York commercial paper [Hear! Hear!]; and in the memorial of the Federal Council, of the size of nineteen quarto pages, the extracts of the official stenographer out of the commercial paper occupy fully four pages [Hear! Hear!], such great value has the imperial chancellor placed upon the stenographer.

By closer inspection one finds that all articles of this commercial paper are nothing else but a business advertisement of the firm of Goulard, Rouse & Bostwick.

In America it is a private business to grant certificates in regard to the meat intended for export. A number of persons in New York make a good business from it. But by degrees Europeans have become wise enough to avoid the middlemen of New York by securing certificates directly from the export places in the West.

The New York men, not being pleased with the loss of their former profit, give their competitors in the West a bad name by saying they do not understand how to examine the meat properly.

This puff appears even in the extracts. In the paper of the American stenographer we read: "The Western colleagues seem to show a great indifference in reference to the manifest superiority of the New York inspection." When Austria received meat from New York which had been subjected to the inspection of the house of Goulard.

Rouse & Bostwick no complaint was ever made. The dreadful stories which New York business men have circulated about their competitors in the West form what the imperial chancellor has communicated to the Federal Council on the condition of the American hogs.

The imperial chancellor has, of course, been more careful in his proceedings, but other people have procured the American pamphlet for themselves, and found that the extracts in the memorial break off just where the puff advertisement begins. The memorial says: "There is but one remedy to protect against danger in the importation of hog meat, and that is by careful inspection." The pamphlet then continues: "Such an inspection will only be guaranteed through the firm of Goulard, Rouse & Bostwick." [Great hilarity.]

If an official stenographer should be called upon to make for the American federal council compilation of what has been written concerning the golden number one hundred and ten, the people there would perhaps come to a peculiar conclusion about German solidity and German industry. [Here the speaker read other passages from the American pamphlet to prove that the pamphlet is written as an advertisement.]

The pamphlet is the more remarkable since Goulard himself acts as a principal witness of the imperial chancellor. His testimony is quoted under the title: "Our reporter's interview with Mr. Goulard of March 14, 1881."

Now, I must say if an order is to be issued upon the basis of such material, the same should read that the only products allowed to be introduced into Germany should first be seen and inspected by Mr. Goulard.

That, gentleman, is the argument for a measure of the most decided effect. This shows how easy the imperial chancellor is influenced in making such proposals to the Federal Council.

Such a prohibitory decree of an article of export is for our people of the greatest importance, since annually several hundred thousand centners are imported.

The memorial says it concerns only about 3 per cent. of our meat consumption. It does not depend upon the general percentage which this importation has for certain parts of Germany and certain classes of the population. For example, it is mentioned in the petition of the Consumption Association for Mines and Iron Works that each workman consumes from 140 to 160 pounds of this product yearly, which amounts to a very high percentage of their entire nourishment. The principal thing is that American *bacon is much* cheaper than the German, and that it is for many people the only meat diet available, which is true in particular of the workingmen of Westfalen. For this reason the board of trade in Westfalen have declared against the prohibition of importation, not, indeed, in consequence of commercial interests, but on account of the difficulty of replacing the product.

Even the chamber of commerce at Dortmund, which upholds the politics of the chancellor, has petitioned against the prohibition. Agricultural societies in Westfalen also oppose the prohibition, simply because the production of hog meat in Westfalen is not sufficient for the supply in these regions and they therefore find the import indispensable.

The question now comes up, how happens it that the Federal Council can issue a prohibition of such importance without the co-operation of the Reichstag [Imperial Parliament]? As a single argument in its favor one paragraph in the customs regulations can be cited, which speaks only of a temporary prohibition for sanitary reasons, and this cannot be taken into consideration with the present case.

The law of the German tariff union mentions, instead of a "temporary prohibition," a "fixed time," for the duration of the prohibition cannot be determined in the beginning; but this can only apply to prohibition of import on account of cattle plague and the like. For this reason the Federal Council is not justified in issuing a prohibition against the importation of American hog meat without the co-operation of the Reichstag, and I hope that the Federal Council will duly consider the material reasons which speak against the prohibition, and not conclude to make the question of law objectionable, in which case we must resort to special proposals to protect our interest.

If you dissent from the prohibition you will confer a great deed of charity for large districts of the population.

THE WAR ON AMERICAN MEATS IN GERMANY.

REPORT BY COMMERCIAL AGENT WAMER, OF DUSSELDORF.

Judging from the tone of the large number of petitions that have recently been addressed to the German Federal Council, praying for a repeal of the law it has in contemplation of enforcing against the importation of American hog meat into the German Empire, a certain class of manu-

facturers here have felt no little anxiety that should the German Government persist in adopting any such stringent measures the American Government might retaliate in a manner that would work very detrimental to the importation of a certain kind of their goods into the United States. This hint towards retaliation by many of our American journals has had a decided effect in stirring up the Germans to feel wherein their interest lies, and they have perceived that the American nation is not that kind to accept anything like the sort of reciprocation their Government proposes to offer by excluding from their markets good and wholesome American products.

Considering the great interest that is now being manifested on the part of the German Government in its offering every possible encouragement to the extending of Germany's exporting trade, and as the industrial classes of Germany, chiefly of the iron and woolen industries, are wide awake to the increasing demand for their products in the United States, and the bright prospects for them in the future, should the tariff on foreign goods to the United States be lowered, there is no wonder that these people should be greatly desirous of putting a cessation to any unwise legislation by their Government that would exert the slightest influence in arresting in any way this thriving business with our country.

A glance at the value of the exports to the United States from Germany for the years 1881–'82 will show the increase above referred to. The total value of exports for the year ending 1881 was $52,989,181, and for 1882, $56,368,542. The values of woolen goods for the same years were $4,815,376 and $5,441,408, respectively, showing a trifle over half a million of dollars in favor of this one class of goods.

The petitions say that to prevent the importation of American hog meat into Germany would be a great deprivation to the indigent laboring classes in the industrial districts, who could not afford to pay anything like the prices that would necessarily be charged for the home production, and would have to live and work on food into which meat would not enter. They (the petitioners) further claim that all the excitement about the American meat containing trichina is to be attributed chiefly to gross exaggerations, without any foundation for proof, and that the German hog meat is just as liable to be diseased as the American.

In the iron mining and smelting district of Aix la Chapelle the petitioners have been very earnest in their appeals. They say the society for furnishing provisions to the workingmen in the iron works of Altenberg issued to their laborers, during the years 1874 to 1882, 428,404 pounds of the American hog meat and its products, and the mining works in the Eifel consumed 42,130 pounds from 1878 to 1882, which was purchased by the workmen in quantities varying from a half to one pound at a time. Now, as the supporters of this prohibitory law claim that *all* the American hog meat that is imported into Germany contains from 1 to 5 per cent. of trichina, or is otherwise diseased, it will be seen that of the above amounts, even if reckoned as containing only 1 per cent., there would have been something like 4,704 pounds of trichina meat consumed by these people—enough to have afflicted every one of them with trichina. But there was not a single person that was so affected.

There were imported into Prussia, via Antwerp, from the year 1871 to 1881, 138,301,590 pounds of American hog meat and its products. Now, if all this amount had contained even 1 per cent. of trichina, it can be reasonably supposed that large numbers of Prussia's laboring people would have become afflicted with trichinosis.

If, after all, the proofs contained in the above petitions, which have

been presented to the German Federal Council in the interest of the working population of Germany, should not have the desired effect, I think the American Government would be perfectly justified in inaugurating some such sort of retaliatory measures as suggested by many American newspapers and feared here.

I have heard it hinted by men whose opinions I have no reason for doubting that the chief object of the prohibition of the importation of American hog meat into the German markets is to force the population to raise its own pork.

WM. D. WAMER,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Düsseldorf, January 10, 1883.

DOES SALT KILL TRICHINÆ?

REPORT BY CONSUL WILSON, OF BRUSSELS.

In a report made to the Department June 14, 1881, on *trichinæ spiralis* in American pork—a subject then very much agitating not only the people of Belgium, but of this entire continent—I gave, in connection with a brief history of this parasite and the previous panics it had produced throughout Europe, the result of my own microscopic examinations of several lots of salted meat said to be imported from the United States into this country. In that paper I not only expressed the opinion that the cyst of the parasite was its tomb, but that I believed it did not long survive in well-salt pork; and I now beg to say that after much subsequent study of this subject I very much doubt whether a single competent microscopist can now be found who will be bold enough to assert that he has discovered the encysted living animal in thoroughly salted hams or bacon.

As the whole question of the dangerous or harmless character of this class of our foreign exports is based upon the truth or error of this opinion, and as there is now an effort being made in Germany to interdict its importation on account of its assumed unsoundness, from my previous professional training and habit of investigating vital phenomena, I have felt justified in expressing to the Department this, as I think, well-founded opinion in the hope that it may lead to such investigations, by more competent persons, as will forever set at rest the frequently recurring and damaging fear of mortal disease from eating American pork.

The most panic-producing writers on this subject generally admit that it is from eating raw or imperfectly smoked or salted swine's flesh that the disease known as trichinosis usually results, and they further confess that when once the little animal is inclosed within the walls of its enveloping cyst its active life ceases, and that, in whatever numbers found, it henceforth ceases to endanger either life or health. Yet, with a rare inconsistency, many of them claim that in this quiescent state it retains its vitality for a long period, even extending through many years. Of this fact there can, of course, be but simple conjecture, seeing that no observer can tell at what exact time the parasite has thus enshrouded himself. But opposed to this theory is that almost universal law of animal life, that longevity of the animal generally bears a direct proportion to the period required for its maturation.

Now, it is claimed by most trichinic observers that the process of generation and birth of this little animal invariably takes place in the stomach and intestinal canal, and that within a few days from its birth it has so maturated as to penetrate the walls of the intestines and rapidly make its way through the various intervening structures to the remote muscular tissue of the animal it infects, there to be speedily incysted and endowed with a subsequent dormant existence of several years, during which time its presence occasions little or no inconvenience. Of this theory of the life and movements of this little worm I can only say that it involves an almost unparalleled exception to the law generally regarded as determining animal life, and ought not to be accepted but upon the most positive proof.

It may further be stated that the law governing parasitic existence in living tissue usually involves the speedy death of the parasite after the pabulum upon which it feeds has passed from under the domain of vital force; hence unless this tiny worm constitutes an exception to this law, its life must be short after the organic structure upon which it feeds has ceased to live. But however this may be, the fact remains, according to my observations, that this parasite cannot live in a tissue saturated with chloride of sodium or common salt. If in this opinion I am mistaken, I can only say that I have failed to receive authentic proof to the contrary, and until otherwise convinced I feel it my duty to reiterate the results of my own experience and observations, and that is, that I have never myself seen, nor found a microscopist who would declare that he had observed, trichinæ in motion or manifesting any other sign of life when found in well-salted meats.

I have myself been present when officially appointed microscopists at some of the abattoirs of this country have been engaged in examining American pork for trichinæ, and have been invited by these gentlemen to see for myself, through their microscopes, the peculiar cell and spiral coil of the animal; but on carefully examining them I have only observed, blended with the tissue and minute salt crystals, the entombed animal, evidently as destitute of life as the structure in which it was embedded. If, then, salt really kills trichinæ, and of it I have scarcely a doubt, it is evidently an injustice on the part of foreign Governments to lay an embargo on our pork product, which of all others, in order to secure it against decomposition on a long journey to foreign markets, is better salted than that of any other country.

Seeing, then, that this question of whether common salt is indeed an effectual destroyer of trichina life is one of such vital importance, not only to our export trade but also to the poor and laboring classes of all countries, I cannot refrain from urgently suggesting to the Department the propriety of an exhaustive examination of the subject, for if it once becomes an established scientific fact that salt does really kill the parasite, and our packers and shippers will but properly salt their meat intended for exportation, foreign Governments will no longer be able to justify their prohibitive measures by an appeal to the danger of communicating mortal disease by the introduction of the already too much slandered American pork.

JNO. WILSON,
Consul.

CONSULATE OF THE UNITED STATES,
Brussels, February 24, 1883.

AUSTRIAN EXPORTS TO THE UNITED STATES.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

I beg to inclose digest of the invoice books of the several consular districts of the Austro-Hungarian Empire, showing the value of the declared exports to the United States for the year 1882.

The aggregate value of the year amounts to $8,708,126.79, being an increase of 16 per cent. when compared with 1881. This increase extends to all the consulates and to all the leading articles of export, with the exception of pipes and drugs, as may be seen from the subjoined table, which presents in a succinct form the principal amounts and their changes during the last four years:

Articles.	1882.	1881.	1880.	1879.
Dried fruits	$1,795,197	$1,494,610	$1,089,346	$1,090,506
Glassware	1,682,544	1,465,254	1,406,279	599,580
Buttons	1,144,523	967,305	1,088,724	1,071,907
Linen and cotton goods	491,155	490,327	472,295	277,508
Fancy articles	464,657	379,015	282,248	175,078
Cloth and woolen goods	313,967	289,331	219,972	173,404
Glove leather	285,607	258,514	255,983	192,168
Tartar, crude	254,041	(*)	(*)	(*)
Pipes and fixtures	210,621	258,414	178,320	104,404
Porcelain	208,468	159,478	36,677	18,398
Gum	182,984	233,160	211,766	267,988
Drugs and chemicals	161,502	468,790	249,911	221,233
Silks and velvets	146,113	83,158	108,461	19,385
Wine, beer, and liquors	116,078	78,474	Not reported.	Not reported.
Hops	113,871	28,217	Not reported.	Not reported.
Musical instruments	100,855	101,851	112,553	65,648
All others	1,035,934	780,763	1,396,295	689,391
Total	8,708,127	7,501,661	7,108,830	4,896,588

*Being relatively small, were classified under drugs and chemicals.

The leading articles of export from this Empire, as may be seen from the foregoing table, are dried fruits, 21 per cent.; glassware, 19 per cent.; buttons, 13 per cent.; and textiles, 11 per cent., the last article amounting to $968,414.73.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, January 24, 1883.

Statement showing the value of declared exports from the consular districts of Austria-Hungary (agencies included) to the United States of America during the year ending December 31, 1882.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Amber, crude				$3,380 30	$3,380 30
Bed feathers		$8,555 82			8,555 82
Books		6,369 76			6,369 76
Buttons		85,414 30		1,059,109 08	1,144,523 38
Cloth and woolen goods		87,017 47		226,949 69	313,967 16
Drugs and chemicals	$1,687 05	18,401 84	$96,345 69	45,067 08	161,501 66

Statement showing the declared value of exports, &c.—Continued.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Fancy goods and jewelry		$32,735 95		$431,920 66	$464,656 [illegible]
Fans				82,840 23	82,840 [illegible]
Fruits, dried	$377,987 34	6,380 87	$1,315,069 08	95,759 46	1,795,196 75
Furniture				40,667 99	40,667 99
Glassware	110 00	1,672,928 34		9,505 87	1,682,544 21
Gloves		8,173 88		57,923 12	66,097 [illegible]
Gum			182,993 52		182,993 52
Hair, human		18,293 22		457 35	18,750 [illegible]
Hops		113,871 34			113,871 34
Insect powder			59,477 01		59,477 01
Leather, skins, and furs		31,048 15	79,487 69	175,071 47	285,607 31
Lentils	63,131 00			31,969 37	95,100 37
Linen and cotton goods		23,259 56		467,895 69	491,155 25
Mineral water	49,564 86	14,321 56			63,886 42
Meerschaum, crude				16,453 40	16,453 40
Musical instruments		3,249 94		97,604 91	100,854 85
Oils	346 55		35,006 13		35,352 68
Pipes and fixtures				210,621 33	210,621 33
Porcelain and pottery	116 54	173,304 26		35,047 08	208,467 88
Rags			29,079 06		29,079 06
Sardines			17,988 42		17,988 42
Seeds			30,752 94		30,752 94
Shawls	52 92			17,115 94	17,168 86
Silks and velvets		3,710 52		142,402 94	146,113 46
Sponges			22,460 10		22,460 10
Tartar, crude				254,040 54	254,040 54
Toys and chipped goods		21,559 04			21,559 04
Wine, beer, and liquors	39,854 31	55,790 14		20,434 03	116,078 48
Wool			19,604 06		19,604 06
Miscellaneous	1,145 96	39,507 15	245,584 47	94,151 45	380,389 03
Total in 1882	533,996 53	2,423,893 11	2,133,848 17	3,616,388 98	8,708,126 79
Total in 1881	415,672 42	2,079,009 99	1,939,655 72	3,067,322 84	7,501,660 97
Total in 1880	149,204 17	1,768,509 61	2,202,968 44	2,988,147 91	7,108,830 13
Total in 1879	344,335 49	825,103 69	1,522,263 79	2,204,864 73	4,896,587 61

NOTE.—The average value of the Austrian paper florin during 1882, 1881, 1880, and 1879 was, respectively, 40.61, 41.33, 41.11, and 41.43 cents, United States currency.

EXPORTS FROM LYONS TO THE UNITED STATES.

REPORT BY CONSUL PEIXOTTO.

The declared exports from the consular district of Lyons to the United States for the year ending December 31, 1882, amounted to $13,713,247.96; in 1881 they were $11,942,209.46; increase for 1882, $1,771,038.50. This increase has related to the following articles:

Silk piece-goods (increase over 1881)	$891,136
Raw silk (increase over 1881)	430,456
Pierced cocoons (increase over 1881)	203,129
Waste silk, combed and spun silk (increase over 1881)	40,813
Organzine silk (increase over 1881)	19,731
Church ornaments and military trimmings (increase over 1881)	11,238
Wines and liqueurs (increase over 1881)	21,503
Argols (increase over 1881)	62,147
Macaroni (increase over 1881)	79,263

The year 1881 closed with flattering prospects for the new year. The orders for goods placed for the spring trade were considerable, and indicated a prosperous season. These hopes were not realized. At the end of January a crisis, produced by the failure of two financial establishments, the Union Générale and the Banque de Lyon and Loire, not only caused very serious and extensive losses, but at one time threatened to involve the gravest consequences.

The thoroughly rotten and utterly dishonest basis upon which these

institutions were organized, the swindling character of their transactions, resulted, as was to be expected, in a *dénouement* which, while it impoverished many and impaired the fortunes of hundreds, at the same time dissipated the extravagant illusions of thousands.

Had the silk merchants of Lyons been less firmly placed, had they been habituated to such character of speculations, and had they ventured more, the disaster to the city would have been all but irremediable.

Fortunately, it has never been the habit of the Lyonnaise fabricant to speculate upon the Bourse, and if led astray by the bad state of legitimate business, but more especially by the magnificent schemes and fictitious dividends which fascinated even those of the coolest blood, the sudden collapse of these illusory hopes came in time to save them from that overwhelming ruin which a longer continuance would certainly have involved.

Escaping from the wild dreams of sudden riches, the silk commerce of Lyons gradually resumed its natural conservatism, and affairs took their ordinary course. This was made very clear to certain British merchants (and in no inconsiderable number), who, believing Lyons to be on the verge of ruin, hurried hither to offer the most ridiculous prices for goods, and found, to their surprise, their offers rejected and the silk market fairly holding its own.

In point of fact, the very article for which there might have been a speculation, and which had never or rarely reached a lower point, was utterly neglected. Silk was a drug in the market, instead of a bonanza!

Over $60,000,000 is the export of Lyons in silk goods alone for year 1882, of which amount, as I have observed already, $13,500,000 was shipped to the United States. This sum exceeds that of 1881 by over $17,000,000, from which it would appear that the Lyons silk trade has improved rather than retrograded. It is claimed, however, and this by the best authorities, that the year has been a poor one, and the figures of the condition house and of the dyeing establishments would seem to confirm this assertion.

Not, then, in the quantity of the exports made, but in the prices realized, must be sought the true key to the commercial situation, and very probably, taking into consideration the general state of trade in the Old World, and especially that of England and the Orient, should this be accepted.

It is surprising, however, considering the low state of trade everywhere—that is to say, in England, on the Continent, and in the East—with the financial reverses above alluded to, that Lyons has continued to preserve her ancient prestige, and that neither her merchants and manufacturers, with their reverses, nor her thousands of operatives without work, have fallen into an actual crisis, on the one side involving bankruptcy, and on the other those violent revolutionary demonstrations for which the city in the past has been renowned. The absence of these extremes confirm the opinion expressed in former dispatches, that Lyons is one of the wealthiest cities of the world, and that her working classes possess an exceptional character.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, January 10, 1883.

SWISS EXPORTS TO THE UNITED STATES.

REPORT BY CONSUL MASON, OF BASLE.

From the statistics reported by the United States consular officers at Basle, Zürich, Horgen, St. Galle, and Geneva, it appears that the aggregate exports of Swiss products to the United States during 1882 were as follows:

	Francs.
Silk and silk goods	45,122,0[illegible]
Cotton goods	2,824,9[illegible]
Embroideries	28,432,7[illegible]
Straw and hair goods	1,584,17[illegible]
Watches and watch materials	13,238,48[illegible]
Music boxes	582,79[illegible]
Cheese	2,849,343
Leather, skins, and leather goods	2,537,7[illegible]
Aniline colors	1,058,11[illegible]
Miscellaneous	2,995,346
Total	101,225,747

This exceeds by 21,893,981 francs the exports of 1881, and is 16,819,839 francs more than those of 1880, which had hitherto been the most prosperous year for Swiss exporters to the United States.

When it is considered that the year 1882 has been, on the whole, a dull and discouraging one for the manufacturers, not only of Switzerland, but for those of all Europe, the significance of this enormously increased shipment of manufactured merchandise to the United States becomes strikingly apparent. The entire record since 1864 presents the following interesting exhibit:

Total exports from Switzerland to the United States.

	Francs.
1864	37,256,642
1865	49,280,049
1866	58,658,373
1867	39,260,318
1868	41,304,991
1869	53,931,428
1870	69,190,244
1871	80,675,680
1872	79,481,103
1873	60,391,809
1874	61,351,931
1875	54,867,355
1876	53,025,445
1877	53,083,944
1878	54,597,878
1879	69,541,701
1880	84,405,908
1881	79,331,766
1882	101,225,747

The varying importation of Swiss goods forms, therefore, a closely accurate barometer of the financial condition of the American people. The growth of luxurious tastes during the flush paper-money times of 1870–'71 ran the importations of silks, watches, embroideries, and music-boxes during the latter year up to more than 80,000,000 francs, but under the chill of panic and depression that came on in 1873 these fell off to 53,000,000 francs a year, where they remained with noteworthy

steadiness until the revival of prosperity, that began in 1879, again pushed them upward to the unprecedented figures of 1882.

America has in fact become the great insatiate market, where the demand for luxuries is always on the increase, and which can be relied on to absorb whatever surplus remains after other countries are supplied. Of the aggregate imports into the United States from Switzerland last year, the three articles of silk goods, embroideries, and watches, all of which may be classed in a general sense as luxuries, made up 86,793,286 francs in value, or more than four-fifths of the entire amount. It is also noticeable that in these three articles of manufacture the item of skilled labor bears a large proportion to the aggregate cost of production, and that consequently the American import demand for them has not been, and probably cannot be in future, met and controlled by home manufactures in the United States.

Notwithstanding the high American tariff, about which European manufacturers so bitterly complain, the skilled watchmakers of the Jura, the silk-weavers of Basle and Zurich, and the machine embroiderers of Appenzell, who are willing to work for less wages than the commonest day laborer would receive in the United States, still enable the Swiss manufacturers to not only hold their own, but to push their conquest further and further toward a practical control of the transatlantic market.

It would be gratifying if there could be found, on the other hand, a proportionate increase of Swiss imports from the United States, but unfortunately there has been no such growth. Switzerland wants but little which the United States now produce, except food, and being an inland country, without ships or seaports, she has no advantages for direct importation, and buys naturally of her immediate neighbors, where she can purchase most cheaply. Of the 15,000,000 francs' worth of American products consumed annually by Switzerland, the principal item has been hitherto that of salted meats. Much of this supply has come into Switzerland indirectly, by way of Germany and France, and some of this has been purchased here at retail, under the impression that it was of European origin.

Now that both Germany and France prohibit the importation of American pork in all its forms, this indirect export into Switzerland will be practically cut off, and until American manufacturers and exporters set regularly and systematically about the task of studying the Swiss market, making and packing goods expressly adapted to local wants and notions, and cultivating a trade here by the energetic, persistent methods which they so well understand and practice at home, there is every reason to suppose that Swiss imports from the United States will in future decrease rather than increase. This is not a flattering picture, but it is true. In Switzerland, as in other European countries, the only really popular article of import from the United States is the Federal dollar. They pile upon our markets the ever-increasing surplus products of their mills and factories; they even refuse to enact a patent law, which would secure to foreign inventors some return for the use of their machinery when built and used here; and look forward hopefully to a day when our reduced tariffs will enable them to make the balance of trade against us still more unequal. There is, of course, nothing to complain of in this; it is simply a condition of facts to be recognized, and, so far as possible, provided for.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, February 26, 1883.

MADEIRAN LABOR FOR THE SOUTHERN STATES.

REPORT BY CONSUL DU PONT SYLE, OF FUNCHAL.

I beg to call the attention, through the Department, of the governors, legislatures, and planters in the Southern States to the supply of labor, fitted for cotton and sugar culture, which is procurable in Madeira. Dr. Goldschmidt has already pointed this out in a report which I inclosed to the Department on January 23, 1883. From that report it may also be seen that Madeira is one of the most densely populated districts in the world—430 inhabitants to the square mile. For some years past there has been a steady emigration from the Azores. In 1879 there was an emigration from Madeira to the Sandwich Islands. Mr. John Hutchison, United States vice-consul and consul for the Sandwich Islands, informs me that within two months he expects to send off about 1,000 emigrants to Honolulu from this port. I am sure that the Madeira peasantry would go more willingly to the United States than to the Sandwich Islands. The American Government is the most popular here. The shorter sea voyage would prove a great recommendation to many. To many others the chance of becoming American citizens would be an inducement. The Madeira peasant is well acquainted with the culture of sugar cane. He is industrious, submissive to authority, and not addicted to drunkenness. He is constitutionally adapted to a semi-tropical climate, and would flourish anywhere south of latitude 37°.

Should an attempt be made from the South to secure the Madeira emigration, the promoters cannot do better than follow the admirable and humane form of labor contract drawn up by the Sandwich Islands Government. A copy of this has been kindly furnished me by the consul for the Sandwich Islands, and reads as follows:

FORM OF LABOR CONTRACT.

No. ——.

This agreement, entered into this —— day of ——, in the year of our Lord 1883, by and between —— ——, agent of the Board of Immigration, a bureau of the Government of the Kingdom of Hawaii, in the Island of Madeira, of the first part, and the party whose name is hereto subscribed, of the second part, witnesseth:

That whereas the said party of the second part is desirous of emigrating to the Hawaiian Islands, there to be employed under the direction of the said Board of Immigration: Now, therefore, in consideration of a passage for himself, wife, and children to the Hawaiian Islands on board steamship ——, and a further undertaking by the party of the first part that the said Board of Immigration will pay or cause to be paid to the party of the second part wages at the rate of *sixteen* dollars, with lodging, fuel, and bedding for himself and family, for each and every month of 26 days' service performed during the existence of this agreement (a day's service to be ten hours in the field, or twelve hours in the sugar house), such wages to be paid at the end of each calendar month of such service, reckoning from the date of the commencement of such service after arrival at Honolulu, and in consideration of a further undertaking on the part of the party of the first part guaranteeing (in case of the violation of the terms of this contract) all the protection of the laws and of the local authorities, and likewise, in case of sickness of himself or his family, that he or they shall be supplied with proper medical attendance, the said party of the second part will duly and faithfully perform such lawful and proper labor as he may be directed to perform, under the auspices of the Board of Immigration, for and during the space of three years next succeeding the date of the commencement of such service after arrival in the Hawaiian Kingdom; it being always understood that he shall not be compelled to labor on Sunday or any holiday recognized by the Government (provided that this exception shall not apply to parties entering domestic service), and that this contract shall not be transferred. And it is hereby further agreed by the party of the first part that the said Board of Immigration will furnish, or cause to be furnished, upon the said premises.

to the wife of the party of the second part, upon her request, and with the consent of the husband, labor or employment, to be paid for at the rate of 25 cents per day, and in like manner to the children, being fourteen years of age and upwards, at the rate of not less than 15 cents per day for girls and 20 cents for boys; and the party of the first part, in consideration of the agreements hereintofore expressed as entered into by the party of the second part, hereby agrees to the same, and undertakes that the said Board of Immigration will pay or cause to be paid the wages hereinbefore set forth, and will keep and perform, or cause to be kept and performed, all the other stipulations hereinbefore set forth.

In testimony whereof we have hereunto set our hands on the day and year above mentioned.

I regard the present as a most favorable moment for starting emigration from Madeira to the Southern States. The people here are in a most distressed and oppressed condition, thoroughly discontented and anxious for a chance to better their condition. The crops have been bad; food is scarce; taxes are overwhelmingly heavy. Some idea of the unfortunate state of a portion of the inhabitants of the Madeira Islands may be gathered from a letter I recently addressed to the New York Herald. A copy is inclosed which I shall be glad if the Department see fit to publish. In this letter I have stated without fear or favor my opinion in regard to the distress now crying for help in these islands. Nor do I see any reason to change the views therein expressed.

L. DU PONT SYLE,
Consul.

UNITED STATES CONSULATE,
Funchal, February 12, 1883.

Consul Du Pont Syle to the New York Herald.

FUNCHAL, *February* 9, 1883.

To the Editor of the New York Herald:

SIR: Knowing you are always quick to promote a charitable endeavor where the object is worthy, I make this appeal to the American people through you for the suffering population of Porto Santo.

Porto Santo is a small island about 40 miles northeast of Madeira. Taylor's guide book tells us * * * "vines and grain are grown there. Other cultivation is difficult, as water is scarce and droughts are frequent. At the present time there are few trees, but when first colonized trees were especially plentiful * * * and were of such dimensions as to warrant their being made into canoes or boats capable of holding half a dozen men or more. The air is dry and invigorating. The long stretch of yellow sand (the only one of the kind to be seen in this group of islands), low, odd-looking houses, and the numerous windmills make its appearance from the sea both peculiar and picturesque. The highest point * * * is 1,650 feet * * *; there are extensive limestone quarries, and the stone is brought over to Funchal in large quantities. * * * There are also many small islets and rocks of no importance.

"* * * (Porto Santo) productions are few. What grain and food supply there may be are (*sic*) consumed on the island; the greater part of the wine, which is of poor quality, is brought over annually to Madeira for sale soon after vintage time. The cattle are especially fine and are much sought after in Madeira for heavy draught oxen.

"At the present time the population of the island is about 1,800, and its government is under that of Funchal."

Such is Porto Santo. In the fifteenth century it was made illustrious by Columbus living there for some time and supporting himself by drafting and selling charts. To day Porto Santo should be the pity of all beholders. It is racked by a cruel famine, the result of an unusually dry winter.

Heart-rending accounts reach us of the piteous state of the scanty population. A letter from a resident of Porto Santo published in the Direito, a local paper, says:

"There is nothing to be earned here. Strong arms are looking in vain for work.

Who will have mercy on this people? Who will help their great misfortune? There are families who cannot make a fire once a day; children who are pale from hunger, and covered with but rags, cry for the mercy of those more fortunate who dwell not in Porto Santo. The want of rain has destroyed the necessaries of life. Cattle seek in vain for fodder and are so weakened that they can scarcely walk. Meal is wanted, but many unfortunates have not one real (the tenth part of a cent) to buy it with. They earnestly implore the management of the Direito, the inhabitants (of Madeira), and strangers on behalf of the poor of that island."

A short time previous to publishing the above extracts there appeared in the same paper the following:

"The custom house of Funchal produced in the past year 313,574,857 reals or almost £70,000; that is to say 87,070,064 reals, or nearly £20.000 more than last year. This addition is partly the result of largely increased taxes on corn, salt, and other necessaries of the people."

As an official of the United States Government, I am not at liberty to criticise the actions of foreign governments, but I am sure I can safely leave it to the heart and head of every American to correctly and justly compare the above extracts and place the blame for the present horrible condition of things in Porto Santo where some of it certainly belongs.

In reply to the cry for help from Porto Santo the governor of Madeira has sent about 420 bushels of grain. There is *talk* of getting up a subscription in Madeira; there is *talk* of the Lisbon authorities giving assistance. If this printed opinion of mine—that this talk of doing things is but talk—should really stir up the Portuguese authorities into making it something more than talk, in company with every other foreigner in Madeira I shall be equally surprised and delighted.

Except by going in open boat there is no means of getting from here to Porto Santo short of chartering a steamer. I am, therefore unable to speak of the state of things there from personal experience. Were I a veteran of the Mexican war, or had my third cousin's sister-in-law's brother lost a front tooth at the battle of Bull Run, I might be drawing a good pension from the Government, and could afford to charter a steamer for Porto Santo. As it is, I can merely say that, having made careful inquiries, I am convinced that there is great suffering from lack of food in Porto Santo: that the people are not to blame for this state of things, but rather the drought, high winds, and —— (?); that more assistance than the Portuguese will give is necessary to prevent further and prolonged distress. The produce of the wheat crop in Porto Santo will not be ready till August, and even then it will be small in quantity, owing to lack of rain. In the mean time ——?

Among the forefathers of the sufferers in Porto Santo it was that Columbus dwelt. From the women of Porto Santo it was that Columbus chose his wife. In Porto Santo he found a quiet home. There it was, while faithfully laboring at his lowly calling, his great mind was revolving those thoughts whose impulse carried him boldly and safely to our western shores. Would it not be historically fitting and graceful that the mighty land which Columbus discovered, should, from the abundance of her wealth, succor the distressed and feeble island where once dwelt he who for America was indeed

"the prophetic spirit
On the wide world, dreaming on things to come"?

L. DU PONT SYLE,
United States Consul for the Madeira Islands.

P. S.—The best way to help the people of Porto Santo would be to send a 200 or 300 ton vessel laden with corn as quickly as possible. If the New York Herald will receive subscriptions for this object, I am sure that my friends, Messrs. C. L. Bartlett & Co. of 115 State street, Boston (though I have not had time to communicate with them), would gladly act as agents for purchasing the corn and chartering a vessel. The readers of the Herald should be duly informed of the distribution of the food.

L. D. S.

TRADE OF ZANZIBAR WITH THE UNITED STATES.

REPORT BY CONSUL BATCHELDER.

Statement showing the imports at Zanzibar from the United States for the year 1882.

Articles.		Imports.	
		Amount.	Value.
American brown cottons	bales	4,565	$276,991
Kerosene oil	cases	110,414	144,177
Yellow soap	boxes	25,537	12,686
Clocks	do	188	4,927
Box shooks	do	3,198	2,910
Biscuit	cases	273	2,566
Turpentine	do	560	3,360
Lumber	pieces	5,761	2,304
Bleached cotton drills	cases	20	1,207
Rosin	barrels	400	1,050
Locks	cases	2	428
Flour	barrels	40	285
Varnishes	cases	48	211
Chairs	do	50	197
Sarsaparillas	do	10	100
Scale	do	1	78
Total			455,650

Statement showing the exports from Zanzibar to the United States for the year 1882.

Articles.		Exports.	
		Amount.	Value.
Large ivory	tusks	2,214	$415,424
Cloves	bales	11,033	255,392
Gum copal	cases	1,125	171,463
Hides		51,907	109,784
Billiard-ball ivory	tusks	1,778	64,122
India-rubber	packages	597	55,505
Red peppers	bales	2,270	37,989
Goat-skins	do	326	15,832
Scrivellos ivory	tusks	638	12,697
Ebony	logs	2,252	3,285
Clove stems	bushels	677	3,181
Aloes	bags	58	1,712
Shells	bales	148	1,128
Gum myrrh	cases	12	650
Ambergris	do	1	140
Yarns	bales	7	136
Total			1,148,459

Statement showing the navigation at the port of Zanzibar, east coast of Africa, for the year ending December 31, 1882.

ENTERED.

Flag.	From—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American	America			4	3,554	4	3,554
	Madagascar			3	1,928	3	1,928
	Mauritius			1	463	1	463
Arab	India	13	15,310			13	15,310
	Madagascar	1	578	1	120	2	698
	Mauritius			1	330	1	330
English	America			1	1,098	1	1,098
	Brava Coast, Africa			1	280	1	280
	Cape of Good Hope	3	8,100			3	8,100
	England			6	5,505	6	5,505
	India	15	19,713	1	280	16	19,993
	Mosambique	13	18,239			13	18,239
	Cape of Good Hope			1	340	1	340
German	Hamburg			2	640	2	640
	Madagascar			4	1,200	4	1,200
	Mosambique			2	625	2	625
French	Madagascar	2	3,150			2	3,150

CLEARED.

Flag.	To—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American	Madagascar			4	2,786	4	2,786
	India			3	1,723	3	1,723
	Muscat			1	1,463	1	1,463
Arab	England	1	2,128			1	2,128
	India	10	12,062	1	330	11	12,392
	Madagascar	1	578	1	120	2	698
English	Brava Coast, Africa			1	280	1	280
	Cape of Good Hope	1	1,500			1	1,500
	India	17	26,339	5	4,980	22	31,319
	Mosambique	13	17,213	1	280	14	17,493
	Mauritius			1	1,098	1	1,098
German	England			2	600	2	600
	Hamburg			4	1,275	4	1,275
	Madagascar			1	250	1	250
French	France	2	3,150			2	3,150

AMERICAN TRADE WITH NAGASAKI.

Statement showing the imports and exports between Nagasaki, Japan, and the United States for the year 1882.

Articles.	Import.		Export.	
	Amount.	Value in United States gold.	Amount.	Value in United States gold.
"Awabi," dried ..... pounds			542	$130 00
Butter ..... do	5,763	$2,242 68		
Carpets		114 85		
Cheese ..... pounds	2,104	457 20		
Clocks ..... number	345	780 20		
Coal ..... tons	86	320 91		

Statement showing the imports and exports, &c.—Continued.

Articles.		Import.		Export.	
		Amount.	Value in United States gold.	Amount.	Value in United States gold.
Confectionery			$53 20		
Cordage	pounds	10,025	1,132 18		
Cotton, raw	do	75	27 00		
Fish:					
Cuttle	do			6,000	$1,275 00
Salted	do	830	61 75		
Flour	do	172,272	6,686 07	8,775	424 65
Furniture			135 80		
Implements and tools			311 40		
India-rubber ware			249 40		
"Irico" (beche de mer)	pounds			500	220 00
Leather	do	631	222 68		
Leather belting	yards	233	108 20		
Machinery			1,158 00		
Medicine			52 60		
Milk, condensed	dozen	208	420 80		
Oil, kerosene	gallons	2,348,655	257,038 36		
Oil, olive	pounds	45	23 80		
Paper, Japanese					482 46
Plants					5 00
Porcelain					2,141 70
Provisions			2,578 62		
Scales and balances	number	46	858 36		
Shoes and boots	pairs	31	77 60		
Stationery			54 04		
Tea	pounds			374,637	42,247 88
Tea dust	do			33,924	1,144 48
Timber and plank			638 40		
Turpentine	pounds	6,130	626 20		
Wax, vegetable	do			3,711	400 00
Sundries			1,883 20		
Total			278,313 50		48,471 11

ALEXANDER C. JONES, *Consul.*

TRADE AND INDUSTRIES OF MEXICO.

REPORT BY CONSUL-GENERAL STROTHER.

The close of the year 1882 finds the Mexican Republic in the enjoyment of continued peace and a degree of material prosperity heretofore unknown in her history.

RAILROADS.

The extensive system of railroad communications which will connect her capital city with those of all the different States of the Union, the principal seaports of the Pacific Ocean and the Gulf, and the whole at several different points with the railroad system of the United States, is advancing rapidly to completion. The progress of this work may be better understood and appreciated by an examination of the inclosed table of roads, open to public traffic up to 31st of October, 1882.

The successful initiation of these important enterprises has given a stimulus to all branches of industry, to the Government and to society, the results of which it would be difficult to estimate.

Length of Mexican railways open to public traffic October 31, 1882.

Termini.	Number of kilometers.	Number of miles.
Mexico to Vera Cruz	424	265
Mexico to El Salto, San Bartolo, and San Luis	83	51
Mexico to Leon and Lagos	443	275
Mexico towards Morelia	167	104
Mexico to Cantia	138	85
Mexico to Trolo	96	60
Vera Cruz towards Jalapa and Chalchicomula	19	12
Vera Cruz to Medellin	22	14
Vera Cruz to Jalapa and Coatepec	114	71
Vera Cruz towards Alvarado	40	25
Puebla to San Martin	38	24
Puebla towards San Marcos	71	44
Puebla to Apizaco	47	29
Puebla towards Matamoros Tzucar	23	14
Merida towards Peto	30	19
Merida to Progreso	36	22
Goatzacoalcos to Tehuantepec	45	28
Paso del Norte to Chihuahua	360	224
Pachuca towards Trolo	45	28
Altata towards Durango	64	40
San Luis Potosi to Soledad	6	4
Tampico towards San Luis Patosi	53	33
Matamoros towards Monterey	7	4
Zacatecas towards San Luis Potosi	23	14
Nuevo Laredo towards Monterey	273	170
Guaymas towards Nogales	276	171
Chaloo to Tlalmanalco	15	9
Tehuacan to Esperanza (tramway)	50	31
Tramways in Federal district, Puebla and Guadalajara	130	81
Manzanillo to Colima	20	12
Branches of Central Railway to Guanajuato, etc	41	25
	3,199	1,987

MINES AND MINING.

Mining, which has hitherto been the chief productive industry of the country, is now increasing to an extraordinary degree both in extent and variety, while the old-established works, generally of silver and gold, are introducing new methods and machinery and actively developing their capacities for production. We hear of the discovery of new veins, the reopening of old and abandoned mines, the discovery and denunciation of iron, coal, and petroleum, and all the elements of material wealth, with a rapidity that baffles statistics. The table inclosed shows the relative importance of the mining interest in the different States during the fiscal year from July 1, 1878, to June 30, 1879, but gives a very imperfect idea of the present condition of the mining industry of the country.

Statement of the silver produced in the different mining States and sent to the mints during the fiscal year of 1878–1879.

States.	Mines.*	Kilograms of pure silver.	Value in Mexican currency.
Chihuahua	15	27,925,958	$1,092,157 43
Durango	33	28,534,697	1,115,965 10
Guanajuato	1	105,311,621	4,118,632 27
Guerrero	2	2,005,612	78,437 99
Hidalgo	2	95,501,983	3,734,986 90
Jalisco	10	34,222,216	1,600,917 12

*These numbers indicate mining centers, where a single vein or where groups of veins may be worked. The metal is extracted generally by amalgamation. The smelting process is sometimes used where the ores are adapted to it. In Sonora and Chihuahua the process of lixiviation is also used.

Statement of the silver produced in the different mining States, &c.—Continued.

States.	Mines.*	Kilograms of pure silver.	Value in Mexican currency.
Mexico	4	8,909,615	$348,446 11
Michoacan	2	6,676,266	237,626 01
Oaxaca	5	3,810,244	149,014 81
Puebla	2	712,991	27,884 27
Queretaro	1	230,872	9,029 15
San Luis Potosi	7	67,538,361	3,053,109 62
Sinaloa	27	11,705,015	457,771 44
Sonora	5	32,917,049	1,287,352 89
Zacatecas	17	117,417,598	4,592,097 90
Total	133	543,120,598	21,903,429 01

AGRICULTURE.

The stimulus given to the agricultural interest has been equally notable. The culture of the cereals, corn, wheat, and barley, has been greatly increased, as has been likewise the planting of sugar-cane, cotton, tobacco, and coffee in those districts adapted to their culture. Companies have been formed and charters granted by the Government to promote the cultivation of the maguey, hemp, and other of the valuable textile plants which flourish peculiarly in Mexican soil.

The Government is also actively exerting itself to extend the cultivation of the vine, the olive, and the silk-mulberry, introducing large quantities of these plants from Europe and elsewhere and distributing them among the most intelligent native planters, and the Italian, French, Swiss, and German colonists now locating in different sections of the republic. The increased demand for American agricultural implements and machinery is the natural result of this revival in agriculture throughout the country. With new seeds and plants, improved methods and machinery, steps are also being taken to introduce better breeds of cattle, horses, sheep, and poultry from all parts of the world where they may be obtained.

MANUFACTURES.

The Government is also especially solicitous and liberal in its efforts to establish and cherish home manufactures of all kinds, and the facilities of transportation afforded by the new railroad lines and new lines of steamships recently started has greatly encouraged the investment of domestic and foreign capital in new manufacturing enterprises. A number of patents have already been granted by the Government to American citizens for new machines and improved methods for making available the numerous and varied natural products of the soil and climate, which have hitherto grown useless and neglected for lack of knowledge and scientific methods for their treatment. In brief, there is no branch of the natural wealth of this country which is not at this period attracting more or less interest and practical attention. It may be noted, however, that cotton and woolen factories, which are the most numerous and important manufacturing establishments in the country, are yet obliged to import from foreign countries the greater portion of the raw material used.

FOREIGN TRADE AND BANKS OF ISSUE.

An examination of the custom-house returns from both coasts, and recent railroad reports, will show that both the internal and external commerce of Mexico is developing responsively and in due proportion to its industrial activity. To provide for the requirements of this increased commercial activity a notable change is taking place in the currency. A number of banks have been chartered in the capital, which are locating their branches in the State capitals, sea-ports, and different commercial centers, issuing notes of denominations from one to a thousand dollars, which paper currency is rapidly supplanting the time-honored but cumbersome and embarrassing silver dollar.

On this subject I am preparing a special report, which I will forward by the next mail.

WAGES, RENTS, ETC.

Following this general movement, wages, rents, cost of living, and prices of real estate have continued to increase rapidly. This rise, while especially remarkable in and near the capital, is more or less notable all over the republic. However, the appended schedule of the prices of public lands in the different States will show but little increase over former rates, and will sufficiently indicate the liberality of the Government in encouraging settlers to occupy its vacant lands.

There is very little system or organization in the matter of wages in Mexico, the prices for the most part depending on the demands of the moment, and regulated by especial agreement, with relation to the urgency of the work and the character of the workman. The commoner laborers and tradesmen, being very unreliable, irresponsible, and incompetent, are mostly employed by the piece or job where the work admits of that arrangement. Neither is there that division of labor here that prevails in the better organized working societies, but most tradesmen are willing to undertake whatever comes to hand, like that useful class, the "Jacks of all trades," who are usually found in sparsely-settled communities, and are so indispensable in building up new countries. The average earnings of an average journeyman in almost any branch in Mexico may be estimated at from 75 cents to a dollar per day, while the possessor of special character and ability may attain to double or even treble that amount. The extraordinary activity in building and repairing which has prevailed here for a year or more, and is still increasing, has raised current prices and has demonstrated the great scarcity of intelligent and reliable workmen in these specialties.

List of prices approximately stated.

Carpenters, per day	$1 00	to	$1 50
Blacksmiths, per day	1 00	to	2 50
Upholsterers, per day	75	to	1 25
Shoemakers, per day	75	to	1 50
Bookbinders, per day	75	to	1 00
Turners, per day	75	to	1 00
Farriers, locksmiths, silversmiths (generally included in blacksmithing), per day	75	to	1 00
Tinners, per day	75	to	87½
Plumbers and gasfitters, per day	75	to	1 00
Pattern-makers, moulders, (in foundries are paid by the piece) gilders, per day	75	to	1 25
Coach-makers, per day	1 50	to	2 00
Harness-makers and saddlers, per day	75	to	1 00
Stone-masons, stone-cutters, bricklayers (all under the same heading), per day	75	to	1 25

House-painters, per day	$0 75 to $1 25
Quarrymen (paid by the piece), common laborers (peons), per day	37½ to 50
Porters or cargadores, a course, per day	12½ to 50
Plasterers, plain and ornamental (per day)	1 25 to 1 50
Tailors (equivalent to per diem)	1 00 to 1 50
Hatters (equivalent to per diem)	87½ to 1 00
Cigar-makers (chiefly women), per diem	50 to 1 00
Seamstresses (per diem)	37½ to 50
Cotton-spinners and weavers, woolen spinners and weavers (paid by the piece, equivalent to per diem)	1 00
Factory hands (per day)	50 to 75
Engine-drivers (per day)	1 00 to 1 50
Stokers (per day)	87½ to 1 50
Railway conductors (per day)	1 00
Machinists (per day)	1 00 to 1 75
Printers (equivalent to per diem)	1 00 to 2 00

In the trades and occupations which may have been omitted in the above list, the current wages of journeymen will be found to vary but little from the average given. Skilled workmen from abroad are now frequently imported at conventional prices much higher than the foregoing.

LEGISLATIVE ACTIVITY.

While the Federal Government is affording the most liberal aid and encouragement to all the legitimate enterprises for material improvement and development of the natural wealth of the republic, it is equally active in the important work of reorganizing all branches of its civil system, reforming and extending its legal codes so as to meet the requirements of this new era of unexampled progress and prosperity. Congress, by an act which took effect on the 1st of November ultimo, has removed the tax of 5 per cent. on the export of silver, which is a great relief to the mining interest. It has passed an act entirely abolishing the interstate customs or excise laws which have heretofore been the most serious embarrassment to commerce in the republic. This act is to take effect on the 1st of December, 1884.

A national banking law, modeled upon that of the United States, is now under discussion, and will probably be passed.

A commission has been appointed to devise a thorough and radical reform in the postal system of the country, with lower rates of postage.

After the 1st of January, 1884, the old system of weights and measures, inherited from Spain, is to be definitely abolished, and the French metrico-decimal system adopted as the national and legal standard. As this system is already in very general use by the Government and the commercial community, the change will be effected with comparatively little difficulty.

A new code regulating railroads has been promulgated recently, while the civil, criminal, and military laws have been reformed and codified.

The system of free schools is being extended and improved, and the question of compulsory education is under discussion.

In fine, with a political administration broadly liberal but prudent, firm but conciliatory; with resources fully adequate if not in excess of its current necessities, and with daily increasing assurances of its stability and peaceful succession, the whole character of Mexican society appears to be undergoing a rapid and favorable change. From year to year political disturbances are becoming less frequent and of less general importance; highway robberies and crimes of violence are diminishing in number and less frequently escape the penalties of the law. Historic, personal, and political rancors, prejudices of race, edu-

cation, and habit, religious intolerance itself, are rapidly modifying and disappearing, as men of all parties, creeds, and nationalities are drawn together by the irresistible magnet of common material interests and their sentimental antagonisms obliterated by the genial current of general public prosperity.

ARMS *vs.* AGRICULTURAL IMPLEMENTS.

As a significant illustration of the present drift of public sentiment, I was told by an extensive dealer in American arms and agricultural implements that while formerly he sold a hundred dollars' worth of warlike arms and munitions to ten of agricultural tools, the proportions were now reversed; and not long before, a certain local notoriety of the mountain districts, who had acquired a formidable reputation as an independent guerilla leader in past wars, and as a frank highwayman in the intervals of peace, had made a descent upon the city, unarmed and unattended, and purchased two plows.

PRICES OF PUBLIC LANDS.

By executive decree, dated November 15, 1882, the prices of public lands subject to location have been fixed as follows:

	Cents per acre.
In the State of Aguascalientes	54
Lower California (Territory)	4
Campeche	18
Colima	36
Coahuila	5
Chihuahua	7
Chiapas	27
Durango	9
Federal District	90
Guanajuato	72
Guerrero	27
Hidalgo	18
Jalisco	36
Mexico	72
Michoacan	36
Morelos	72
New Leon	7
Oaxaca	27
Puebla	72
Querétaro	72
San Luis Potosi	18
Sinaloa	9
Sonora	9
Tabasco	27
Tamaulipas	7
Tlascala	18
Vera Cruz	45
Yucatan	18
Zacatecas	36

This tariff to remain in force to December 31, 1884. In the original publication the price is stated in Mexican currency and the unit of land measure the hectare. In the foregoing translation I have assumed the value of the Mexican dollar to be 90 cents, and the hectare equivalent to two and a half acres English measure, which I presume is sufficiently near the actual values for all practical purposes.

TELEGRAPHS.

There are at present about ten thousand miles of telegraphic lines in operation within the territory of the Mexican Republic connecting with

those of the United States at various points on the northern border and by the submarine cable laid between Vera Cruz and Galveston, which has been in operation for more than a year.

Recently a submarine cable laid along the Pacific coast has put Mexico in direct telegraphic communication with Central and South America. The system is extending continually and rapidly, while the character and efficiency of the service is notably improving.

TEMPERATURE.

Lowest temperature reported from several places and showing the variety of climate in the Mexican Republic, December 14, 1882:

	°F.
Mexico	41
Zacatecas	41
Morelia	41
Pabellon	46
San Luis Potosi	48
Guanajuato	48
Guadalajara	48
Querétaro	52
Puebla	54
Mazatlan	59
Chilpancingo	61
Iguala	63
Vera Cruz	72
Monterey	73

DAVID H. STROTHER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
City of Mexico, December 30, 1882.

MONTHLY REVIEW.

[Inclosure in Consul-General Strother's report.]

CITY OF MEXICO, *December* 29, 1882.

The secretary of public works has addressed a circular to the governors of the various states of the republic, notifying them that the director of the botanical garden of Valencia, Spain, has transmitted an extensive catalogue of seeds of the various agricultural, garden, and forest plants of Spain, which he proposes to exchange for similar seeds of native growth to the department of public works, in return for which they will receive a collection of the foreign seeds which are expected from Spain about the 1st of next March.

The same secretary of public works has published a letter, in which he calls attention to the desire of the Government to take steps for improving the native stock of Mexican horses, and introducing blooded stock from other countries. For this purpose he asks the governors of the States to furnish data as to the number of stock-raising farms, number of animals raised annually, condition and grades of the stock, and whatever else may concern on the question, and to transmit such information to the department as quickly as possible.

Messrs. Louis Legorreta and Arthur Mayer have obtained a concession from the secretary of public works, allowing them for the term of ten years to gather the cactus, or *maguey* plant on Government lands or on such lands as they may acquire. Provided the company organized establishes in the country, within two years from the date of the contract, a paper and textile mill, utilizing the leaf of the cactus, the Government will give the company a premium of $30,000 for each mill, said mills to cost not less than $150,000 each. The contract requires one of these mills to be established within the federal district.

We do not doubt that this is only the beginning of an industry which will assume large proportions, for the abundance of the maguey plant in most parts of the republic furnishes ample field for almost indefinite extension of this manufacturing industry.

Eligible real estate is actually held at enormous figures in this city. A few months ago a building on Cinco de Mayo street was purchased for $40,000. It has just been sold for the sum of $85,000, and will be used as a bazar for the permanent exhibition of French goods and manufactures. The past week has also witnessed the purchase of a large tract of land beyond the Paseo, in the western limits of this city, by several American capitalists, who contemplate the erection of an American hotel on the site. The purchase having been made under an unexpired bond, was on terms more moderate than those generally ruling, yet was at an advance of several hundred per cent. over the price lately asked for the same property. The ruling prices of real estate are phenomenal, and they serve to prove the general spirit of enterprise and activity now prevailing.

The coinage of the new nickel coins is progressing steadily, and they will soon be issued to the public. The machinery for the purpose, imported from England, gives full satisfaction, and is capable of coining 5-cent pieces to the amount of $7,000 to $8,000 daily. The total authorized issue of this nickel coinage at present will amount to $4,000,000, and its circulation will do much to remedy the great inconvenience experienced here formerly from the scarcity of small coins.

The secretary of public works has given a concession to José Fulcheri to organize a company under the name of the Mexican Industrial Society, for the purpose of growing the mulberry tree and promoting the raising of the silk worm in different parts of the republic. The conditions of the concession require the grantee to erect 20 establishments in places decided upon by the department of public works, and to build immediately in this city, or within the federal district, a mill provided with the latest improved machinery. The Government, to encourage the development of this kind of industry, here so little known, will give $1,200 annually for the term of ten years to each one of the 20 establishments so founded, and $600, besides the land, to all colonists established to assist in this industry.

During the present month was also passed a contract for the establishment of the new savings and mortgage bank. It is authorized to establish its main house in this city and to open branches in such cities of the republic as it may judge best. Before opening its doors an actual deposit of $50,000 in coin must exist in its vaults. This capital can be increased subsequently, with the approval of the executive. The amount of its authorized loans, the percentage of value to be advanced to borrowers, the form of its acceptances and obligations, the creation and maintenance of a reserve fund, its chartered existence for thirty years with exclusive privileges and exemption, its supervision by a Government official, its monthly publication of accounts, &c., are definitely provided for in the charter.

As local banks now existing have largely withdrawn their loans on mortgages, and as no savings banks as yet exist here, this new institution will prove a great advantage to borrowers on real estate and to small depositors. Any sum, no matter how small, will be received, but the amount loaned can, in no case, exceed one-half of the appraised value of the securities offered. Much interest is felt in the matter as a means of developing habits of thrift and economy among the people. The journals of Vera Cruz and other interior points are already calling for the establishment of branch houses.

The fishing for pearls in the Gulf of California continues to be a profitable industry. A telegram received in this city a few days ago announced the finding of one weighing 75 carats, which is believed to be one of the largest and finest known. It was sold on the spot to the first bidder for $14,000.

LA GUAYRA AND ITS COMMERCE.

REPORT BY CONSUL BIRD.

THE CITY OF LA GUAYRA.

La Guayra, in latitude 10° 37′ north and longitude 66° 56′ west of Greenwich, a city of nearly 10,000 inhabitants, lying on the shore of the Caribbean Sea, is the principal seaport of Venezuela and the commercial emporium of Caracas, the capital of Venezuela, from which it is distant 10 miles. Nestled down by the sea-shore and at the very foot of a range of lofty mountains rising nearly 7,000 feet in height, the view of this old city, as the steamship approaches it in the gray dawn, is exceedingly picturesque; and the American who, going down to the

sea, watches the beautiful spires of New York as they fade from his vision realizes, as this old Spanish city, full of strange aspects and foreign airs, looms up before him, that he is far from his native shores. From the very margin of the low rocky beach rise the white stone houses with red-tiled roofs that, piled back of each other and up the mountain side, look out from the green amphitheater of hills upon the blue sea below.

The population of La Guayra is cosmopolite, and comprises some of almost "every kindred, every tribe." There is perhaps no community in the United States of like size that is more orderly and law-abiding. A residence of eighteen months here warrants the assertion that there has not been during that time a single homicide in the city, and a drunken man upon the streets is something rarely or never seen. This latter circumstance may probably be attributed to the fact that the people are addicted to the use of the red wines of Europe that, being admitted free of duty, are so cheap as to be within the reach of even the poorer classes; and, although the native rum is pure and cheap, yet the people, by taste and habit, seem to prefer the lighter and healthier drinks. It might be suggested, in this connection, that the use of these light wines may yet serve to solve the temperance question in the United States.

Alexander von Humboldt said of La Guayra that "it is the hottest place on earth," and this statement, based, doubtless, upon a very short experience, has found its way into the American and English encyclopedias. The schoolboy that reads it will implicitly believe it, because it harmonizes with his preconceived idea, to wit, the nearer the equator the hotter the climate. He would, however, exhibit a wondering incredulity if one should tell him that it is sometimes hotter in New York than it ever is in La Guayra, and yet such is the case. For while it is true that the warm season here continues from March until November, yet the Fahrenheit thermometer rarely or never registers as much as 94°. From careful and regular observations the general range during the entire year may be truthfully stated at from 76° to 88° F. The equability of the temperature is also a singular phenomenon when it is remembered that, during a period of ten days and nights, the actual variation will not amount to more than five degrees. The morning twilight is so short that daylight, to speak figuratively, comes like a flash. At 9 o'clock the sun is beaming with meridional glare, but at 10 o'clock the trade winds begin to stir the sea and temper the heat. These increase until evening twilight, about which time the vessel under full sail goes out to sea. The tides, in their course to the Gulf stream, run always strong towards the west. At night comes a calm over the waters that is succeeded by delightfully fresh breezes sweeping down from the mountain sides. This is the time to stroll out on the Cardonal, a fine *paseo* by the sea, and revel in the *dolce far niente* of the tropical summer night.

The perfect natural drainage of the city, despite the filthy habits of the lower classes and the almost total lack of any sewerage system, would seem to insure immunity from disease; and the total absence of marshes and stagnant ponds makes impossible even the suggestion of malaria. And yet every few years occur a few sporadic cases of yellow fever, caused doubtless by intemperate indulgence in fruits and heedless exposure to the heat. Aside from this it may be truly said that no city is healthier. The death rate averages only five per week, fully half of which is made up of persons under adult age. This rate would probably be reduced if the poorer classes were able to intelligently care for

their children. Many persons from Caracas and the interior regularly visit La Guayra for its mild climate and fine sea bathing. The American whose frame has been wasted and whose blood has been thinned by the ravages of disease can nowhere find a more genial retreat from the chilling storms of winter. Such an one, pale and emaciated, landing here, has seen the blush of health again settle on his cheek and almost half a hundred weight come back to his shriveled anatomy in the short space of six months.

LA GUAYRA TO CARACAS.

The approaches from La Guayra to Caracas are three in number. The first in importance is the coach road, about 20 miles long, a grand piece of engineering constructed about forty years ago. Over this road passengers are transported in fairly comfortable coaches in four hours. The mountain passes through which the road winds are replete with gorgeous panoramas of natural beauty that awaken in the mind dreams of Switzerland and the Tyrolean Alps. The second is the old road, built long ago by the Spaniards, paved most of the way, but now fallen into disuse and decay. The third, *el camino de dos aguadas*, accessible only to foot and horse men, is the shortest and in every way the most attractive route. Skirting along the precipitous mountain sides under the deep shade of a luxurious tropical foliage, through a rarefied air that is redolent with the perfume of strange flowers and resonant with the melody of strange birds, the voyager mounts higher and higher, crossing the little *rios* that leap with splash and foam in their downward course to the sea, until at last he stands upon the mountain crest. Behind him, and below, and seemingly so near, lies the upturned face of the smooth sea that spreads away to the north in a limitless desert waste; while before him, and three thousand feet below him, is a vale clad with the verdure of eternal spring, and as lovely as the happy valley of Rasselas. And, yonder, on its quiet breast reposes the once unfortunate but now smiling city of Caracas—a thing of beauty spread out upon the lap of nature, in its reality a scene more charming than airy fancy ever traced upon the speaking canvass. And there, stretched far away towards the east, flows the placid little river Guire that, with low grass-fringed banks and still waters gleaming in the morning sun, seems like a thread of silver upon a carpet of emerald—beautiful river, that from its crystal depths gave cooling draughts to the maimed and dying thousands that breathed away their sad lives upon its green banks after that fateful earthquake day! And beyond the city, far off to the south, looms up the vista of eternal mountains, a fancied vast and somber curtain that giant hands have hung high up on the ethereal skies.

CARACAS EXPOSITION.

The railway between La Guayra and Caracas, the grading of which is almost completed throughout its entire length, is now half constructed, and under the careful and energetic management of General William A. Pile, formerly United States minister to Venezuela, it will doubtless be finished in time for the centennial exposition of Bolivar that will be formally opened at Caracas in July proximo. For this affair, much elaborate preparation is being made, and in view of the fact that the interests of France, Germany, and England especially will be fully represented there, it is greatly to be desired that the merchants and manufacturers of our own country shall prepare such an exhibit of the grand resources of the United States as shall maintain and even extend the enviable prestige

that we already enjoy here. If personal experience counts for anything, it may be safely promised that Americans will find here a generous and hospitable welcome, and no efforts will be spared to make their visit agreeable and interesting. Besides, the inconveniences of a sea voyage from New York have been reduced to a minimum, owing to the establishment of a line of entirely new American steamships under the management of Messrs. Boulton, Bliss and Dallett, of New York. These steamers are complete in all passenger appointments, swift, sure, and safe, and are commanded by long-experienced American seamen, who are of course scrupulously polite and careful of the comfort and convenience of passengers.

COMMERCE OF LA GUAYRA.

It is gratifying to be able to make the following comparative exhibit of imports at this port, to wit:

From—	1881.		1882.	
	Pounds.	Value.	Pounds.	Value.
England	2,820,963	$437,863 32	10,784,351	$896,897 73
France	9,032,722	848,672 70	9,630,461	727,548 24
Germany	4,404,433	664,594 75	4,825,641	866,521 51
United States	28,611,129	778,706 14	28,816,011	1,246,506 62
Other countries	3,249,758	287,112 15	4,740,752	299,621 26

It will thus be seen that, from the second rank in 1881, the United States has advanced far in front of all other nations in her trade with this port.

The following table of imports is appended in order that our merchants and manufacturers may have some idea of the goods imported during the year last passed:

From—	Merchandise.	Provisions.	Hardware and furniture.	Drugs and medicines.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
England	5,117,439	1,220,920	4,214,419	231,573
France	1,010,624	2,835,778	5,531,939	252,118
Germany	1,383,758	1,370,398	1,282,196	789,286
United States	835,002	18,899,721	8,616,549	464,739
Other countries	728,632	3,705,829	272,134	34,157
Total	9,075,455	28,060,646	19,917,289	1,771,873

It will appear from this statement that, in spite of the facilities of England, the United States is able to compete with her in the hardware trade.

The following exhibit will show the amount of exports from the port of La Guayra for the year ended December 31, 1882:

To—	Pounds.	Value.
Germany	12,654,121	$1,171,948 36
United States	7,764,798	1,331,735 90
France	16,216,902	1,824,793 21
England	75,917	26,852 08
Other countries	1,414,005	192,300 38
Total	38,125,743	4,547,629 87

This exhibit shows an increase of exports over 1881 amounting to the sum of $764,004.85; and an increase of exports to the United States amounting to the sum of $150,684.76.

From the above statistics it appears that, in the commerce between this port and the United States, there is a balance of trade against the latter amounting to the sum of $85,229.28. This balance, however, is only apparent, since, of coffee exported to New York, there were 10,368 bags, of the value of $153,218.67, entered at that port for transshipment to Europe, and hence this amount is not properly chargeable to the United States.

The following table exhibits the tonnage of La Guayra for the year 1882:

Nationality.	Steamers.		Sailing vessels.	
	No.	Tonnage.	No.	Tonnage.
German	49	64,779	9	2,615
English	60	72,982	4	1,253
French	73	110,545	12	3,049
United States	32	51,588	8	885
Other countries	12	13,368	18	3,729
Total	226	333,262	51	10,931

Venezuela is in a state of transition. The influence of arts and manufactures is being slowly but surely exerted, and with a stable government the country gives promise of early prosperity. With a climate of perpetual summer, with rich fields teeming with tropical luxuriance, with mountains pregnant with mineral wealth, and broad plains alive with flocks and herds, she needs only an active industrial population to place her on the highway to wealth and independence. Direct taxes are unknown, the revenues of the Government being chiefly derived from imports. If it shall be said that the import duties are onerous, it is sufficient to reply that under the operations of a protective tariff Venezuela aims to develop her natural resources and render herself more independent of the world. As our own Government, by taxing foreign manufactures, has opened rich bonanzas of iron and coal and darkened the skies with the smoke of her mills and furnaces, so Venezuela, guarding her proper interests, hopes, with the swinging hammer and the glowing forge, to lay bare the inexhaustible riches of her mountains and valleys, with the shining plowshare to upturn the wealth of her fertile fields, and from the humming spindle and the flying shuttle to weave the fair fabric of her industrial independence.

WINFIELD S. BIRD,
Consul.

UNITED STATES CONSULATE,
La Guayra, February 12, 1883.

IMPORTS.

Statement showing the imports at La Guayra for the year ending December 31, 1882.

Articles.	Quantity.	Value entered.	Countries whence imported.
	Pounds.		
Merchandise	5,117,439	$896,897 73	England.
Provisions	1,220,920		
Hardware and furniture	4,214,419		
Drugs and medicines	231,573		
Total	10,784,351		
Merchandise	1,010,624	727,548 24	France.
Provisions	2,835,778		
Hardware and furniture	5,531,939		
Drugs and medicines	252,118		
Total	9,630,461		
Merchandise	1,383,758	866,521 51	Germany.
Provisions	1,370,398		
Hardware and furniture	1,282,198		
Drugs and medicines	789,286		
Total	4,825,641		
Merchandise	835,002	1,246,506 62	United States.
Provisions	18,899,721		
Hardware and furniture	8,616,549		
Drugs and medicines	464,739		
Total	28,816,011		
Merchandise	728,662	299,621 26	All other countries.
Provisions	3,705,829		
Hardware and furniture	272,134		
Drugs and medicines	34,157		
Total	4,740,752		

Total imports, 58,797,216 pounds, =$4,037,095.36. The amount of duties could not be obtained.

EXPORTS.

Statement showing the exports from La Guayra for the year ending December 31, 1882.

Articles.	Germany.		United States.		France.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Coffee	11,571,056	$1,016,899 44	6,857,366	$1,196,908 25	10,882,054	$1,122,296 36
Cocoa	814,268	98,715 83	35,508	4,711 82	5,206,612	678,125 38
Hides	35,366	3,857 68	596,307	63,107 72	13,308	1,442 87
Deer skins	15	8 11	140,267	29,900 33	4,435	1,361 81
Goat skins			115,761	19,916 64	2,126	331 00
Coin	1,174	35,852 84	260	13,597 62	96	13,811 47
Cotton					25,869	1,930 00
Tortoise shell			509	926 40	130	193 00
Living plants	529	96 50	65	7 72	663	115 80
Caustic barley	205,059	15,830 05			14,721	2,950 58
Mora					22,263	117 34
Miscellaneous	26,654	687 85	18,755	2,759 90	44,630	2,117 60
Total	12,654,121	1,171,948 30	7,764,798	1,331,735 90	16,216,902	1,824,793 21

Statement showing the exports from La Guayra—Continued.

Articles.	England.		Other countries.		Total weight.	Total value United States gold.
	Pounds.	Value.	Pounds.	Value.	Pounds.	
Coffee	8,240	$985 26	190,678	$20,315 57	29,509,394	$3,357,394 85
Cocoa	60,313	7,913 00	1,118,455	148,123 83	7,230,156	987,588 26
Hides			2,800	297 22	647,776	66,786 42
Deer skins					144,717	31,270 25
Goat skins					117,887	20,347 01
Coin	82	17,138 40	178	14,519 97	1,790	94,920 36
Cotton					25,868	1,220 00
Tortoise shell					639	1,119 40
Living plants	7,265	810 60	236	194 93	8,758	1,225 55
Caustic barley					219,780	18,780 65
Mora					22,268	117 34
Miscellaneous	17	4 82	106,658	8,848 86	196,714	14,419 68
Total	75,917	26,852 08	1,414,005	192,300 38	38,125,743	4,547,230 87

NAVIGATION.

Statement showing the navigation at the port of La Guayra for the year ending December 31, 1882.

ENTERED.

Flag.	From—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
German	Hamburg	49	64,779	9	2,018	58	66,797
French	St. Nazaire	73	110,545	12	3,049	85	113,594
English	Liverpool	60	72,982	4	1,253	64	74,235
United States	New York	32	51,588	8	935	40	52,523
Other countries	Various	12	13,368	18	3,729	30	17,097

CLEARED.

Flag.	To—	Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
German	Hamburg	49	64,779	9	2,018	58	66,797
French	St. Nazaire	73	110,545	12	3,049	85	113,594
English	Liverpool	60	72,982	4	1,253	64	74,235
United States	New York	32	51,588	8	935	40	52,523
Other countries	Various	12	13,368	18	3,729	30	17,097

TRADE OF LA GUAYRA WITH THE UNITED STATES.

Statement showing the imports and exports between La Guayra and the United States for the year ending December 31, 1882.

Articles.	Imports.		Exports.	
	Amount.	Value.	Amount.	Value.
	Pounds.		*Pounds.*	
Coffee			6,857,366	$1,196,808 25
Cocoa			35,508	4,711 32
Hides			596,307	63,107 72
Deer skins			140,267	29,900 33
Goat skins			115,761	19,916 64
Coin			260	13,507 62
Tortoise shell			509	926 40
Living plants			65	7 72
Miscellaneous			18,755	2,759 90
Merchandise	835,002			
Provisions	18,899,721			
Hardware and furniture	8,616,549	$1,246,506 62		
Drugs and medicines	464,739			
Total	28,816,011	1,246,506 62	7,764,798	1,331,735 90

NOTE.—The value of exports above stated is incorrect, owing to their undervaluation for payment of export duties. The true declared value of the same, as is correctly stated in the digest of invoices of this consulate, amounts to the sum of $1,431,639.07, United States gold.

COLOMBIA AND ITS PEOPLE.*

REPORT BY MR. SORUGGS, MINISTER RESIDENT AT BOGOTA.

NEW YORK TO CARTHAGENA.

In making the voyage from the United States to Colombia, we must embark at New York either for Aspinwall or Savanilla; for between our Southern ports and those of Colombia there is no direct line of communication, nor is there any direct line between the ports of Cuba and those of Colombia. Between New York and Savanilla there is now, however, a direct line of ocean steamers, owned by an American company; but under our present navigation laws these steamers can neither obtain an American register nor sail under the American flag.

By embarking on a steamer of this new line, the North and South American Steam Navigation Company, we should reach Carthagena or Savanilla within eight days, making one call at the Bahamas.

CARTHAGENA, SAVANILLA, AND BARRANQUILLA.

Carthagena is one of the oldest of the Spanish-American seaports. In the time of Philip II, it was one of the strongest naval stations in the world. Its fortifications, still in fair condition, seem to have been constructed without regard to expense, and for all time. The massive walls of the city are still, to all appearances, impregnable, and the

*This is the first of a series of reports which Mr. Scruggs proposes to write on Colombia and its people, its industries and foreign commerce, and on the best means for the enlargement of the commercial relations of the United States therewith. The series very properly begin with a description of the country and its inhabitants, without a clear understanding of which it is impossible to fully appreciate its trade relations. The country, and the habits and customs of its people, being once understood, its foreign commerce is more easily comprehended.

ancient subterranean passes leading outward to the foot-hills of the adjacent mountains are still visible. The entrance to the magnificent harbor is studded with ancient fortifications, which though now unused for more than half a century, seem almost as good as new. Formerly the city was connected by ship channel with the river Magdalena, at a point many leagues above the Delta, and was therefore in easy communication with the fertile valleys and plateaus of the interior, the gate of commerce in the time of peace, and secure alike from protracted siege or successful assault in time of war.

The decline of Carthagena seems to have commenced with the present century, and to have steadily continued to within the past fifteen years, when the commerce of the country began to revive. In the mean time the ship canal connecting the port with the great fluvial highway of the interior, having fallen into disuse, became filled up and overgrown with tropical jungle, so that the few foreign trading vessels visiting the coast sought harborage further up, within easy distance of the river, near the present site of Savanilla. Meantime the short railway of 14 miles, which connects this new harbor of Savanilla with the river at Barranquilla had been projected and built by a German company; and thus through the apparent apathy of its property owners, Carthagena found itself supplanted by Barranquilla, a new city of some 25,000 inhabitants, the outgrowth of steam navigation on the Magdalena. But the harbor of Savanilla, though now the principal one of the republic, is neither convenient nor safe. It is shallow, full of drifting sand-bars, and exposed to furious wind-storms, while the new port of Barranquilla is quite inaccessible from the Delta by reason of its treacherous sand-bars, so that with the opening of the ancient Dique or ship channel between Carthagena and Calaniar, or the construction of a railway between the first-named point and Barranquilla (both of which enterprises are being agitated), Carthagena will regain her ancient prestige and become the chief port of the republic.

THE VALLEY OF THE MAGDALENA.

The great valley of the Magdalena, extending from the Caribbean coast to the equatorial line, is one of inexhaustible natural resources. Its width varies from 100 to 150 miles before gradually sloping to a point on the northern borders of Ecuador. At the mouth of the river Cauca this valley branches off into another of less general width but of greater elevation, and consequently possessing a more equable and temperate climate. The river Cauca is itself navigable by light-draught steamers as far up as Cali, a point less than 80 miles from the port of Buenaventura, on the Pacific coast. The lower valley of the Magdalena is one vast alluvial plain, a large portion of which is subject to periodical overflow. In fact, during the rainy season the greater portion of it is usually under water. This, however, might be prevented, and the fertile lands reclaimed, by a system of dikes far less expensive than those on the Lower Mississippi. But in a country like this, where population is sparse and nature lavish in her bounties, such enterprises are not readily undertaken. As we ascend the river to a point some 250 miles above Barranquilla, the banks become higher and better defined. Here, inundations are infrequent and the soil incredibly fertile. In the days of the Spanish viceroyalty, this was the garden of New Granada, and traces of the magnificent estates of the old Hidalgos are still visible. But these rich plantations seem to have been abandoned when emancipation of negro slavery was proclaimed in 1824; and few of them have

since been reclaimed. They are now mere grazing grounds for immense herds of ungroomed and almost unattended cattle, and many of them are completely overgrown by thick impenetrable jungle and forest.

The negro and his descendants, who now inhabit this once prosperous region, live an idle, shiftless sort of life, subsisting upon the indigenous fruits and fish. Agriculture receives very little attention, and cattle breeding is the chief industry, even among the more ambitious and enterprising of the inhabitants. Within the past few years, however, there has been a very marked improvement. A number of small villages and trading stations have sprung up all along the margins of the river, where small merchants have established a kind of barter trade, and ship fruits, cattle, hides, eggs, poultry, and palm nuts to the coast, receiving in return small supplies of foreign goods, such as cotton cloth, cheap jewelry, and other small articles of American, English, or German manufacture. But the chief commerce of the river is the carrying trade between Barranquilla and Honda, the last-named place being the great inter-depot for the shipment of coffee, indigo, tobacco, quina bark, hides, minerals, and other exports of the interior table-lands of the Andes. This trade now employs over twenty river steamers, besides a number of bungoes, which constantly ply between the two points named.

The river itself is one of the physical curiosities of this region. With its source a little southward of the equatorial line. it flows in general direction due northward, with a current of greater average rapidity than the Mississippi, and carries an average volume of water nearly as great. Its waters, always muddy, are often so charged with sand and sediment that a tinkling metallic sound is distinctly audible from the upper deck of the steamer. In many places it is full of counter-currents and whirlpools, not unlike those seen in the great Yangtse Kiang, in Eastern Asia, uprooting trees and cutting away the loamy banks, filling in new islands and tearing away old ones, and thus constantly changing its main channel. In some places its waters are expanded over an immense plain to the width of from 2 to 5 miles; in others they are forced into a narrow channel, between the extending foot-hills of the adjacent mountains, where the rapidity of the current renders its ascent by steamers difficult and dangerous. Thus, from Nare to Honda, a distance of some 200 miles, it is little else than a mere succession of whirlpool and cataracts; and the motive power of the steamers being necessarily out of proportion to their tonnage, accidents and wrecks are not unusual. No wonder that, on a river like this, freights are incredibly high, and the rates of insurance beyond precedent.

The entire distance from Barranquilla to Honda, following the tortuous course of the river, is 780 miles, and the voyage usually requires from ten to twenty days, according to the state of the water. In making it we pass through three distinct grades or belts of country, distinct alike as to soil, topography, climate, scenery, and the general appearance and character of the inhabitants.

The first 200 miles is, as I have said, little else than an expanse of swamp, overgrown by reeds and rushes, attended by occasional spots of dry land, inhabited only by negroes and mulattoes. The next 300 miles is likewise a vast plain on either side, but seldom subject to overflow; the site of abandoned plantations, alternated by dense forest and occasional patches of maize and banana. The mango and the plantain are indigenous, and the bread-fruit and calabash tree are often seen. The remainder of the journey is through the volcanic region, where the fertility of the soil, salubrity of the climate, and majesty and grandeur of

the scenery combine to make a most desirable country, but which has been heretofore carefully avoided by the industrious emigrant, for the sole reason, perhaps, that its government has been too unsettled or unstable to insure protection to the rights of person and property.

THE INHABITANTS.

The inhabitants of this volcanic region differ as widely from those of the coast and lower valley as the two regions of country differ in general aspect, and this difference is equally well defined, whether we regard their peculiarities of dialect, their personal appearance, or their daily habits of thought and life.

The Indian and his descendants, who constitute the basis of population in the upper valley, are deferential, and often courteous in manner and language, while the negro and his descendants, who constitute the basis of the population in the lower valley, are usually irreverent, aggressive, quarrelsome, and shamelessly immoral.

The uplander speaks the Castilian with tolerable accuracy and purity, while the lowlander employs a kind of jargon which is often unintelligible even to his own countrymen of the table lands.

The Indian seldom drinks anything stronger than a decoction of molasses and maize, *chiche*, which, although very stupefying, is never intoxicating, while the mulatto drinks a vile species of native brandy called *aguardiente*, fiery and intoxicating. Both peoples are very superstitious, but in opposite directions. The highlander believes in modern miracles, spiritual epiphenies, angelic guidance, and visitations, and is governed almost entirely by a deep religious sentiment, directed by the Catholic Church. The lowlander believes in charms, incantations, and witchcraft, but pays little or no attention to the church or its requirements. The first seems to delight in rendering a kind and hospitable service without expecting anything in return; the second never thinks of doing a kind or benevolent act or of rendering a polite service without pay. The one is reticent and dignified, often evasive and untruthful, but never uncivil or inhospitable; the other is garrulous, profane, and often uncivil, ready to assert his fancied equality upon all possible occasions, quick to quarrel, and difficult to appease when excited or angry. The Indian is naturally docile, obedient to authority, and conservative in his habits of thought and life. The mulatto, on the other hand, is a constitutional *pessimist*, and is ready for a "revolution" upon short notice and upon the slightest pretext.

WILLIAM S. SCRUGGS,
Minister Resident.

UNITED STATES CONSULATE,
Honda, Colombia, July 5, 1881.

PUERTO CABELLO CONSULAR DISTRICT.

REPORTED BY CONSUL BEACH.

With a view of obtaining an intelligent understanding of the topography, localities of population, and general financial resources of my consular district, and to some extent, through the leading merchants of the several principal towns, learn their wants and opinions regarding the merchandise in which they deal, I have, as leisure offered opportu-

nity, visited the chief points by steamboat, railroad, coach, and other conveyance. An outline of the knowledge derived is herewith presented for the information of those who read the published consular reports, giving them some general intelligence of this country, its natural formation, means of communication, productions, required supplies, &c.

Puerto Cabello, having a population of about 12,000 (whose harbor, bay, and general marine facilities have been described in a previous despatch), contains five wholesale dry-goods stores, five wholesale grocery stores, two wholesale hardware and crockery stores, and two wholesale drug stores. Hats and boots and shoes are sold at wholesale by the dry-goods jobbers, and furniture is sold to some extent by the wholesale dealers in hardware and crockery and groceries. In the city there are about one hundred retail stores in the same departments of trade. The principal manufacturing of the city is carried on by a tannery and a foundry and machine-repairing shop, a mill for grinding coffee, and two soap and candle factories. Chairs and mirrors are all imported, but some furniture is made in carpenter shops by olden time methods, even to sawing the boards from logs by hand.

Within 6 miles of Puerto Cabello there are four villages ranging from 200 to 1,500 in population, and likewise a more rural and scattered population on plantations and in the fertile mountain valleys.

About 5 miles from the coast at Puerto Cabello is a range of the Andes, whose highest elevation is about 4,000 feet, but between whose summits there are deep valleys, abounding in pure streams and a productive soil. In fact many of the mountain sides are very free of surface stone, sustaining a luxuriant growth of vegetation, showing how valuable they might be rendered under judicious agricultural treatment. An occasional patch of corn, indifferently cultivated, fully attests the capacity of the soil to yield prolific harvests.

The State of Carabobo, one of the eight States of Venezuela, besides the city of Puerto Cabello, embraces within its domain the city of Valencia, the capital of the State. Valencia is south of Puerto Cabello, on the opposite side of the high intervening mountain range, 36 miles distant by the circuitous and zigzag traveled road, but by air line the distance is not more than one-half. In going from Puerto Cabello to Valencia an elevation of 1,800 feet is reached, about 10 miles northwest of Valencia, from which point to Valencia there is a descent of 200 feet, making that city 1,600 feet above the sea level. A good mountain road has been constructed, which from the point where the coast is left to the summit of the mountain pass is about 20 miles. It was constructed by much skill and great labor, necessarily on the zigzag system. In places great ledges were blasted away, and immense walls erected. Geological information may not be desired in a report of this character, and I will only say that the ledges have all the signs of being the original formation; are in the main gray, like the Catskill ranges, but possess the peculiar and distinguishing characteristic of having thin veins of nearly white flint. The road is available for coaches, or wagons and carts, mule carts, and donkeys led or driven, which transport passengers and merchandise. For grandeur and sublimity the mountain scenery equals that of the Alps along the shore of the Mediterranean.

Valencia makes all its importations and exportations through Puerto Cabello. It is situated in a mountain valley about two miles in width, through which flows a small river. On the north, between the city and Puerto Cabello, the mountains rise to the height of a thousand feet or more above Valencia. On the south the mountains are low. Nine miles to the eastward there is a large lake, possessing the strange peculiarity

of having several good-sized inflowing streams, but no outflow. Farther to the eastward, and around to the south and southwest, the country is quite level, and a considerable portion of it more or less productive, with but a small proportion of its productiveness utilized. The city has a population of 20,000, with numerous signs of thrift and prosperity. Its public buildings are the state-house, a Catholic cathedral, three Catholic churches, two hospitals, a market, and the municipal building. Its central park and garden is very beautiful, and its other parks and the elevated plaza possess numerous attractions. There are issued two daily newspapers and one weekly, the latter by the State government. All are well supplied with presses and general printing material obtained in the United States, which give entire satisfaction. I may pertinently remark here that in my intercourse with the people I find a very friendly feeling existing toward the United States, particularly on the part of the press.

The number of firms engaged in the wholesale business at Valencia is as follows: Dry goods, five; provisions, six; hardware and crockery, five; drugs and medicines, two. Most of these are very extensive concerns. They supply goods to the eastward to Victoria, which is about 50 miles, where the Laguayra supply is met; on the south, to the sources of the Orinoco River, 250 miles or more; and on the southwest to Colombia, 300 miles or over. A part of this broad expanse is covered by cultivated plantations, part by the plains devoted to cattle pasturage, and part is undisturbed nature. There are abundant evidences that gold and other minerals abound to an unknown extent—that is, it is known that they exist, but whether in paying quantities for mining is not determined. The chief productions are coffee, cocoa, cattle, cotton quite restrictedly, sugar, indigo in small amount, corn and beans ample for home supply, and fruits and small vegetables in profusion. Cattle, horses, mules, donkeys, hogs, goats, and fowls are abundant. Wild game among the mountains and out on the plains is also plentiful, including the whole range from jaguars to pigeons. Deer are very numerous, and deer-skins, together with cattle-hides, goat-skins, coffee, and cocoa, are valuable articles of export.

The principal manufacturing establishments in Valencia are a tannery, three soap factories, hat factory, sugar refinery, iron foundry and machine shop, brass and copper works, and several concerns for making wagons and carts. The latter, from the method of transporting merchandise, is an important industry. A survey for a railroad has been made between Valencia and Puerto Cabello, with a 3½ per cent. mountain grade, but it will probably not be built very soon to interfere with the method of transportation in vogue. The usual cost of transporting merchandise between Valencia and Puerto Cabello is 50 cents per hundred pounds.

Valencia rate of wages: Clerks and bookkeepers per year, $500 to $1,500; carpenters, painters, and masons per day, $1.50 to $2; tailors, shoemakers, and other mechanics, from $9 to $12 per week; porters, $25 per month; general laborers, 80 cents to $1 per day; men on plantations, 50 to 60 cents a day and keeping; female cooks and servants, $3 per month; male cooks and servants, $6 to $10 per month. Salaries of State officers: Governor, $2,880; secretary of state and treasurer, each, $1,920; State judges, $1,500; clerks of State officers, $720 All prices are given in United States currency.

Prices at Valencia: Horses, $100 to $150; mules, $150 to $200; donkeys, $30 to $40; cows, $20 to $30; meat, 8 to 20 cents per pound, the highest priced without bone; chickens, each, 20 to 30 cents; milk, 5.

cents, quart; cabbages, 3 to 5 cents; potatoes, 5 to 6 cents, pound; eggs, 25 to 30 cents, dozen; oranges, 30 to 50 cents, 100; bananas, 4 cents, dozen; beans, 4 to 5 cents per pound; charcoal, 20 cents, bushel; corn, $1.25, 100 pounds; common sugar, 4 cents per pound; refined sugar, 15 cents per pound; coffee, 8 cents per pound. The Puerto Cabello prices have been given in another article. Transient patrons of the Venezuelan hotels are charged $1.60 per day, which covers lodging, three meals, light, and service, there being no long list of extras as in Europe.

Northwest from Puerto Cabello, about 30 miles distant, is the village of Tucacas, with a population of 1,200. A small steamboat plies between the two places. Tucacas is on the Gulf of Triste, and has a comfortable harbor for vessels drawing 8 feet of water. It is a place of considerable marine importance, by reason of its being the shipping port for copper and copper ore produced by an English company 55 miles from the coast. On account of the shallowness of the water, the ore has to be lightered out a mile and a half into the gulf, where large vessels, principally sail, but some steam, are loaded. The ore is brought down from the mines by a 2-foot-gauge railroad, which will be described in a separate article. Along the line of the railroad there are a few small villages, having a population of from 100 to 1,500. At the mines about 300 men are employed in mining, who, with the railroad employés, make a population of about 400. The mines are worked day and night. The miners are divided into three gangs, each working eight hours. They are not employed by the day, but are paid by the cubic yard. The mining work is being increased. During the past year 32,000 tons of ore were taken out, which was a quantity larger than any previous year, but a larger amount will be taken out the present year. The mines extend into the side of the mountain nearly on a level, and not directly downward as in Lake Superior at Hancock and Houghton. The ore yields a percentage of copper ranging from 6 to 50, averaging about 20. The poorest quality is smelted near the mines, while the best quality is all carried to England, principally to Swansea, and there smelted.

Starting from Tucacas the course of the railroad is southwesterly, and for most of the way through a very level section. For 23 miles the elevation is but 150 feet, and for 50 miles it is 700 feet, the grade being heavier as the mountain is approached. Along its line the soil is black, deep, and extremely fertile, producing trees to the height of 150 feet, vines as long as the trees are tall, and an almost impenetrable jungle from 10 to 20 feet in height. At no place along the railroad line is there a side outlook for the distance of a quarter of a mile. Most of the way by the side of the roadbed there is a wall of vegetation composed of interlocked vines, broad-leaved plants, bamboos, and reeds. The great forest abounds in tigers and other wild animals, large and small snakes, great ant nests on trees, and many kinds of tropical birds, some of them having exceedingly gay plumage. The clearing of the land is not as difficult as might be supposed, as much of the vegetation is tender and easily cut down, soon dries, and when burned leaves the land very clean. Corn, when fairly cultivated, grows as rank as on the richest land in the United States. Beans to the extent of nine varieties grow to perfection when given cultivation. Pine-apples, bananas, oranges, and lemons grow with but little care or attention. Cotton, grapes, olives, coffee, cacao, and many other merchantable commodities might be grown in great quantities, and doubtless will be when enterprise is inspired by a good government of assured stability. For the growth of sugar-cane there is no better soil and climate in the world, the "bottom lands"

of Alabama not excelling this soil. There are many wild honey-bees in the forests, living in trees, whose honey to a small extent is gathered by the natives. The timber is chiefly mahogany, cedar, royal palms, and other kinds pertaining to the section, including several dye-woods. The material for cordage grows spontaneously, and might be grown in quantities sufficient to supply the world. Very little is made, and that of the rudest character.

Back from the mines, toward the summit of the Andean chain dividing Venezuela from Colombia, are the cities of Barquisimeto, population 29,000; Duaca, 11,000; San Felipe, 9,000; Ligeseque, 8,000; and many villages. The maritime business of all this section, and that of the villages along the coast from Puerto Cabello to Coro, which is midway between Puerto Cabello and Maracaibo, centers at Puerto Cabello. About one-third of the foreign business of Venezuela is done by the way of the port of Puerto Cabello. The railroad and steamboat transport considerable merchandise; much is carried by small sailing-vessels, but the larger part is carried by pack donkeys and in ox and mule carts from Barquisimeto, 120 miles from Puerto Cabello, and from the remoter towns. The donkey is an important element in transportation. A donkey carries 150 pounds, and, in trains, is maintained on the road at a cost of about 10 cents a day. The railroad company has found it difficult to compete with donkey transportation.

Nearly all the soil in this portion of Venezuela is arable and susceptible of profitable cultivation. Yet, aside from corn, beans, fruits, vegetables, fresh meats, soap, candles, leather, and fuel, nearly all the commodities used are imported. Pure water abounds nearly everywhere. The shade temperature along the seaboard ranges throughout the year from 70 to 87, being only five degrees lower in winter than in summer. The daily changes between night and midday are never more than 10°, usually 8°. At Valencia and other places, at an altitude of from 2,000 to 3,000 feet, the night temperature is usually about 10° cooler than on the coast, and the midday temperature is frequently from 5° to 10° hotter. On the coast the trade winds blow almost unceasingly from 4 to 8 miles an hour, while great gales are unknown, the winds having an equability corresponding to the uniformity of temperature. In all that relates to meteorology it is the same, for all rain storms are mild and of short duration, a rain rarely extending over a period of from four to six hours. The proportion of clear weather is much greater in Venezuela than in the United States; and much greater along the coast than among the mountains—the storms in more than nine cases out of ten rising among the mountains, and not over the sea. There is not the slightest evidence of any connection between the weather in the United States and Venezuela, not even the remotest influence of a northern gale or "blizzard." The reason of the temperature averaging 5° cooler here during the winter than the summer months is wholly due to the sun running farther to the south, which shortens the daylight here about one hour per day. The daylight is much longer here in the winter than at the north, and considerably shorter in the summer, a greater uniformity being maintained. The growth of vegetation is much the same at all seasons and periods of the year. In Puerto Cabello the market at all times is supplied with fresh fruits, vegetables, and melons, and "spring flowers" and "spring chickens" are never a rarity.

"In U. S. gold" are valuable words for all persons transmitting money to Venezuela, or in establishing payments to be made in Venezuela. United States silver is of 4 per cent. less value than United States gold, and if a payment is not especially designated, the agent, consignee, or

debtor will assume to save 4 per cent. by paying in silver. To illustrate: the freight on a cargo of coal or lumber amounting to $2,400, if not stipulated in what it should be paid, would realize $2,400 in silver; but if the payment was "in U. S. gold" the amount of silver would be $2,500. Thus the words "in U. S. gold" become highly valuable.

HORATIO N. BEACH,
Consul.

UNITED STATES CONSULATE,
Puerto Cabello, Ven., February 7, 1883.

PORT CHARGES AT MARACAIBO.

REPORT BY CONSUL PLUMACHER.

The recent litigation respecting the question of the contract for towage and buoyage at this port having been definitely settled, the contractor has published the tariff of ships' dues, which I beg to submit for the information of the Department.

A peculiarity of the rules at this port is that entering vessels pay no dues whatever for towage, buoyage, or pilotage, unless circumstances oblige the pilot to use a steamboat to board the entering vessel, in which case 10 cents per registered ton is collected. This rule was made on account of the frequent heavy weather at the bar, which often renders it impossible for the pilots to cross in a sailing craft. Outward pilotage is also free, but other dues are collected as follows, according to the wording of the contractor's notice:

Departing vessels which do not employ a tug-boat, except those directly dispatched to ports of Europe or the United States, will pay as buoyage dues, for each ton, according to Venezuelan measurement, 50 cents.

Departing vessels employing a tug-boat will pay for each ton according to said measurement, 80 cents, and for every 100 kilograms of coffee, quina, hides, cotton, and cacao 12 cents. For every 100 kilograms of dividivi, woods, skins, and other native productions on board as cargo, 2 cents.

It will be seen from the foregoing statement that it costs nothing for a vessel to enter at Maracaibo, but there is considerable expense attached to departure.

It should be remarked that the ton, according to Venezuelan measurement, is 240 pounds less than with us, thus increasing the tonnage of an American vessel by about 10 per cent.

Previous to departure, a measurement is made here, but in a somewhat crude manner, which, as might be expected, gives very ample margins in favor of the contractor.

The foregoing amounts are calculated in United States money.

As Maracaibo is yearly increasing in importance, the information contained in this dispatch will, I hope, be of service to ship-owners and masters of vessels.

E. H. PLUMACHER,
Consul.

UNITED STATES CONSULATE,
Maracaibo, January 25, 1883.

TARIFF REDUCTION IN VENZUELA.

REPORT BY CONSUL PLUMACHER, OF MARACAIBO.

I have the honor to inclose a copy and translation of the executive decree of January 26 last, removing the extra import duty of 30 per cent. upon goods introduced into Venezuela by way of the Antilles. This measure, in my opinion, shows considerably better judgment than was displayed in the establishment of this extra imposition, and the interests of the country at large will be thereby benefited. It will also affect most favorably the American "Red D" line of steamers, the only vessels of any importance carrying our flag in these waters. It must be noted, however, that the animus against Curacao and Trinidad still exists, as direct importations from those points continue to be weighted with the additional 30 per cent.

E. H. PLUMACHER,
Consul.

UNITED STATES CONSULATE,
Maracaibo, February 13, 1883.

[Translation.]

The President of the United States of Venezuela, in use of the faculty conceded to him by article 2, law vi of the Treasury Code regulating the fiscal laws, and with the affirmative vote of the federal council, decrees:

ARTICLE 1. The products, goods, and merchandise exported from Europe and the United States to Venezuela, and accompanied with all the documents required by the customs laws, may be transshipped in foreign colonies from one vessel to another to proceed to their destination, and will be considered as arriving directly from the original points of export.

ART. 2. When, by lack of immediate transport, it may become necessary to disembark the said products, goods, and merchandise in foreign colonies, they may be reembarked for Venezuela without being considered as colonial exports, always provided that, in addition to the consular documents from the port of original dispatch, the owners or consignees present at the custom-house of the republic where the goods are landed a certificate from the Venezuelan consul in the colony asserting that the said goods were only there on deposit for lack of vessels to take them to their destination.

ART. 3. The provisions of the foregoing articles will take effect from the 15th of February next, in all the custom-houses of the republic.

ART. 4. The minister of finance is encharged with the execution of this decree.

Signed, sealed, and legalized at the federal palace in Caracas, January 26, 1883, 19th year of the law and the 24th of the federation.

GUZMAN BLANCO.

Countersigned:
J. P. ROJAS PAUL,
Minister of Finance.

AMERICAN VS. EUROPEAN TRADE IN THE ARGENTINE REPUBLIC.

REPORT BY CONSUL BAKER.

The foreign commerce of the port of Buenos Ayres for the year ending December 31, 1882, shows a small increase over that of the preceding year. From tables which I have just received from the national statistical office, it appears that the imports amounted to $47,764,247 and the exports to $40,863,296; total, $88,627,543. Comparing these figures with those of the year 1881, we have the following result:

Year.	Imports.	Exports.	Total.
1882	$47,764,247	$40,863,296	$88,627,543
1881	44,222,418	39,268,207	83,490,625
Increase	3,541,829	1,595,089	5,136,918

Of the imports, only $3,071,031 were entered free of duty. The balance, $44,693,216, paid an ad valorem duty, ranging from 2 to 50 per cent., and producing $12,909,087. Of the exports, only $3,585,235 were cleared free of duty; the balance, $37,278,061, paying an ad valorem export duty of 6 per cent., and producing $2,236,827.75. An additional duty of 1 per cent. on both imports and exports increases these amounts by $819,713, making the total revenue to the Government from these sources amount to $15,965,627.75 for the past year.

TRADE OF BUENOS AYRES WITH EACH COUNTRY.

The following table shows the amount of trade which the port of Buenos Ayres, during the year 1882, had with each country, to wit:

Country.	Imports.	Exports.	Total.
Germany	$4,384,000	$4,520,120	$8,904,120
West Indies	120,367	701,512	827,877
Belgium	2,737,174	12,141,706	14,878,850
Brazil	1,902,504	1,030,583	2,933,087
Canada	49,027	379,033	428,060
Spain	2,684,395	738,126	3,422,531
United States	4,513,761	2,091,603	6,605,364
France	10,640,919	14,355,550	24,996,469
Holland	971,330	65,660	1,036,990
England	15,650,644	2,870,797	18,521,442
Italy	2,674,398	1,405,539	4,079,937
Paraguay	530,849	37,861	568,710
Portugal	35,484	28,780	64,264
Sweden	700	.....	700
Uraguay	831,593	215,061	1,046,654
South Africa	.....	150,211	150,211
Unknown	37,101	131,144	168,245
Total	47,764,247	40,863,296	88,627,543

These totals, as I have said, only represent the trade of Buenos Ayres. The returns from the other ports of the republic, most of them

of small consequence, will somewhat increase these figures, and, it is thought, will bring the total commerce of the country up to a little more than $100,000,000 for the year. It will be observed that France still enjoys the lion's share of the trade, though England exceeds in the amount of her imports, and Belgium almost laps her in the exports. The reason of this great trade with France and Belgium is that they now receive a large proportion of the Argentine wool export.

IMPORTS IN DETAIL.

The following table shows in detail the principal imports of this port during the year 1882, to wit:

Articles.		Amount.	Value.
Oil:			
Linseed	kilograms	97,064	$1,7[illegible]
Olive	do	2,810,269	833,[illegible]
Olive	dozen	23,396	56,7[illegible]
Alcoholic liquors	liters	4,378,484	52[illegible]
Do	dozen	112,105	402,[illegible]
Wire for fencing	kilograms	12,380,960	992,[illegible]
Jewelry			518,[illegible]
Alcohol (pure)	liters	1,193,905	138,[illegible]
Arms and ammunition			177,[illegible]
Rice	kilograms	5,963,059	596,[illegible]
Sugar:			
White	do	2,962,909	417,9[illegible]
Refined	do	11,630,538	2,305,[illegible]
Crude	do	1,155,528	131,[illegible]
Tiles	thousand	7,285	127,[illegible]
Candles, stearine	kilograms	375,868	147,[illegible]
Ship chandlery			180,[illegible]
Cocoa and chocolate	kilograms	91,048	57,0[illegible]
Coffee	do	1,546,468	361,[illegible]
Boots and shoes			597,[illegible]
Stove coal	kilograms	76,335,816	763,[illegible]
Canned meats			60,7[illegible]
Beer (in bottles)	dozen	80,715	18[illegible]
Beer	liters	7,619	1,1[illegible]
Cigars	kilograms	90,882	126,[illegible]
Cigarettes	thousand	2,735	6,7[illegible]
Copper and bronze manufactures			90,[illegible]
Coke	kilograms	564,573	21,2[illegible]
Leather, and its manufactures			105,[illegible]
Drugs and chemicals			341,[illegible]
Spices and other condiments			225,[illegible]
Tin, and its manufactures			107,[illegible]
Matches	gross	210,568	226,[illegible]
Preserved fruits			339,[illegible]
Manufactures of gutta percha			50,[illegible]
Starch	kilograms	2,079,948	8,265,[illegible]
Iron and steel:			
Unworked	kilograms	12,680,849	727,[illegible]
Manufactures			1,955,[illegible]
Threads, of all kinds, for sewing			361,[illegible]
Bone manufactures			79,[illegible]
Type, &c			257,[illegible]
Agricultural implements and machinery			679,[illegible]
Musical instruments			158,[illegible]
Toys of all kinds			83,[illegible]
Kerosene	liters	4,760,828	330,[illegible]
Lamps, &c			148,[illegible]
Stationery, &c			222,[illegible]
Earthenware			173,[illegible]
Lumber, of all kinds			2,521,[illegible]
Lard	kilograms	200,226	28,[illegible]
Sewing-machines	number	11,458	174,[illegible]
Engines and other motors			369,[illegible]
Patent medicines			125,[illegible]
Paper:			
Writing	kilograms	366,546	119,[illegible]
Printing	do	1,317,571	307,[illegible]
Wall	do	92,259	22,[illegible]
Papier maché			11,[illegible]
Umbrellas and parasols			45,[illegible]
Perfumery			243,[illegible]
Dried fish			208,[illegible]
Building stones			140,[illegible]

Articles.	Amount.	Value.
Furs		$293,453
Paints and paintings		207,300
Lead and manufactures		35,511
Porcelain ware		94,906
Cheese ..... kilograms..	721,691	335,601
Snuff	11,283	8,267
Clocks and watches		66,286
Ready-made clothing		1,523,245
Salt ..... kilograms..	17,666,428	104,407
Hats and caps		555,328
Tobacco ..... kilograms..	2,491,205	634,548
Saddles and harness		218,815
Tea ..... kilograms..	240,675	205,809
Cloth and thread:		
Cotton ..... kilograms..	5,291,208	4,208,658
Cotton ..... meters..	9,938,181	499,128
Cotton, various articles		991,356
Hempen ..... kilograms..	3,043,981	582,163
Hempen ..... meters..	1,327,226	318,831
Hempen articles		48,057
Pack thread ..... kilograms..	915	675
Pack thread ..... meters..	1,328,118	244,545
Pack thread articles		229,531
Woolen ..... kilograms..	58,868	196,851
Woolen ..... meters..	2,318,431	1,357,371
Woolen articles		368,810
Silk ..... kilograms..	8,678	161,750
Silk ..... meters..	11,696	6,791
Silk articles		334,485
Mixed ..... kilograms..	26,388	214,229
Mixed ..... meters..	4,082,657	966,170
Mixed articles		520,839
Other manufactured textiles	4,174	3,074
Do		29,203
Cement ..... kilograms..	8,212,260	181,415
Glass and glassware		366,675
Wine ..... liters..	42,883,065	3,875,303
Wine in bottles ..... dozen..	93,759	341,016
Yerba:		
Parguayan ..... kilograms..	2,384,552	326,385
Brazilian ..... do....	5,051,049	638,761
Zinc, and its manufactures		42,290
Live stock for breeding purposes		202,695
Materials for railways		2,516,868
All other unenumerated articles		2,627,407
Total		47,764,247

EXPORTS IN DETAIL.

The following table shows in detail the principal articles exported from Buenos Ayres during the year 1882, to wit:

Articles.	Quantity.	Value.
Animal oils ..... kilograms..	476,024	$59,560
Horns and horn piths ..... do....	713,813	106,984
Jerked beef ..... do....	11,429,472	1,600,122
Hair ..... do....	1,182,967	532,268
Bones and bone ash ..... do....	11,478,877	468,419
Skins:		
Goat ..... kilograms..	52,991	31,796
Kid ..... do....	30,590	45,885
Hides:		
Cow, dry ..... number..	835,423	3,173,636
Cow, salted ..... do....	255,745	1,325,612
Horse, dry ..... do....	29,840	42,385
Horse, salted ..... do....	139,652	279,304
Skins:		
Sheep ..... kilograms..	18,888,438	3,399,912
Carpincho ..... number..	21,203	21,203
Nutria ..... kilograms..	149,586	104,711
Other		56,958
Wool:		
Unwashed ..... kilograms..	92,581,271	24,071,114
Washed ..... do....	78,754	20,486
Ostrich feathers ..... do....	45,951	114,878

Articles.	Quantity.	Value.
Hide cuttings ..... kilograms..	699, 935	$41, 9[illegible]
Tallow and grease ..... do ..	12, 258, 631	1, 777, [illegible]
Animals on the hoof	.....	64, [illegible]
Linseed ..... kilograms..	18, 644, 472	1, 2[illegible]
Indian corn ..... do	88, 353, 665	1, 76[illegible]
Peanuts ..... do	46, 558	1, 9[illegible]
Wheat ..... do	245, 445	9, [illegible]
Animal black ..... do	1, 936, 770	77, 4[illegible]
Hay ..... do	536, 604	6, 4[illegible]
Beans ..... do	67, 625	2, [illegible]
Dried blood ..... do	82, 852	2, 4[illegible]
Sal ammoniac ..... do ..	190, 685	43, [illegible]
Rags ..... do ..	33, 218	17, [illegible]
Preserved meats ..... do	.....	1, 7[illegible]
Barley ..... do	118, 949	2, 3[illegible]
Ox tails ..... do	4, 310	[illegible]
Artificial guano ..... do	1, 111, 945	27, 7[illegible]
Flour ..... do	46, 000	3, 2[illegible]
Vegetables	.....	6, 5[illegible]
Woods of the country	.....	12, 6[illegible]
Other articles unenumerated	.....	219, 6[illegible]
Total exports	.....	40, 863, 296

TRADE OF BUENOS AYRES WITH THE UNITED STATES.

The trade of the United States with the port of Buenos Ayres during the year just closed shows a considerable increase in the total amount over that of 1881. While the imports from the United States have had a very marked increase, the exports from here are perceptibly reduced. Indeed, it appears from the custom-house returns that our imports into Buenos Ayres for 1882 were nearly half a million of dollars greater than they were the year previous for the entire Argentine Republic. On the other hand, while the declared exports amounted to $3,912,805.67 in 1881, they only reached to $3,540,042.94 in 1882, being $372,762.73 less.

EXPORTS TO THE UNITED STATES.

The following table shows the amount and value of each article of export from Buenos Ayres to the United States, as declared at this consulate for the year ending December 31, 1882:

Articles.	Amount.	Value.
Dry ox and cow hides ..... number..	535, 183	$2, 398, 572 59
Salted ox and cow hides ..... do	28, 055	187, 564 27
Horse hair ..... bales..	1, 230	313, 070 95
Goat skins ..... do ..	261	113, 765 53
Nutria skins ..... do	302	146, 951 11
Feathers ..... cases..	153	61, 708 11
Carpincho skins ..... number..	25, 708	28, 705 91
Wool ..... bales..	875	89, 355 01
Deer and stag skins ..... number..	13, 357	16, 910 61
Deer and stag skins ..... bales....	7	
Hide cuttings ..... bales..	396	13, 094 02
Old iron ..... tons..	.....	15, 556 55
Horse hides ..... number..	2, 635	1, 063 40
Rags and paper stock ..... bags..	23	579 49
Horns ..... number..	86, 666	8, 021 78
Horn piths ..... pounds ..	17, 105	
Bone and bone ash ..... do ..	4, 133½	90, 837 25
Dried blood ..... bags..	13, 133	42, 411 61
Animal black ..... do..	4, 587	9, 487 59
Sundries ..... bales..	15	2, 397 16
Total	.....	3, 540, 042 94

The export business from this port to the United States has exhibited no new features of any importance, and during the last year has been characterized by general dullness. It was only during the last quarter that there was any activity at all. For the greater part of the year the low prices in the United States or the very high prices here greatly retarded shipments. The above table shows a falling off of more than 200,000 in the number of hides shipped; of 700 in the number of bales of wool shipped, and of about 200 bales in the number of nutria skins shipped. There was an increase of about 500 bales in the shipments of horse hair, while in dried blood, and bones and bone ash there was an increase of about 50 per cent.*

IMPORTS FROM THE UNITED STATES.

I regret that I am not able to give the amount and value of the imports from the United States to this port during the last year in detail, but at present the Buenos Ayres custom-house is not prepared to furnish me these statistics, and they will have to be deferred until my next annual report. The great bulk of the American trade, however, still consists of such articles as alcohol, rice, kerosene, lumber, lard, tobacco, starch, furniture, agricultural implements, &c., though the tendency towards other lines of manufactured goods is constantly growing and strengthening, and the returns, when I can procure them, will exhibit that the United States are making inroads upon the trade of other nations in specialties in which heretofore our merchants have been able to do scarcely anything in this market.

The demand for the cheaper classes of furniture manufactured in the United States is every year more pronounced and more assured.

In agricultural implements, also, our trade continues to increase. During the season just closed the demand for American farming implements was greater than the supply, owing to the unusually large harvest, and the result was that large quantities of English farm machinery, much of which on account of the preference given to our patterns had for a long time been lying in store unsalable, found a ready market; and it is not improbable that, now having been favorably introduced, it may in the future to some extent divide the demand with that from the United States.

American cotton goods, which a year or so ago were so favorably introduced into this market and promised such good results, but which, on account of the sudden call for the same class of goods at home, our manufacturers neglected to cultivate and follow up, are still in some request, but the great bulk of the trade in cottons remains in the hands of British importers.

The trade in American plated ware, which, on account of its superior finish, was so well received here a couple of years ago, continues to attract, and now appears to be well established. So also for our fancy articles and "Yankee notions," there is always a good demand and request.

ASSISTING AMERICAN TRADE.

I have at different times received letters and circulars from American merchants asking as to the prospect of introducing certain lines of manufactures in the Argentine Republic and requesting me to interest myself

* For a general comparison of the different articles exported from Buenos Ayres in 1882 with those of 1881, see the May number (19) of the "Reports of Consuls of the United States," pages 13–15.

in their behalf. In all such cases I have turned their letters over to such parties or houses as dealt in the articles referred to for their consideration. This is about all that I am permitted by consular regulations to do. As for entering into partnerships or doing business on a commission, our American merchants should understand that any such thing, whether done directly or indirectly, is expressly prohibited.

AMERICAN HOUSES WANTED.

As I have heretofore sought to impress upon our manufacturers, it is not that their articles are not as good, and indeed in many cases better than those which are on sale here from Europe, which prevents their introduction, but that the great majority of the business houses of Buenos Ayres are mere branches or agencies of parent houses in the large manufacturing districts of England or France; and hence they are able to make sales on terms far more favorable than American merchants living in New York and doing business with the river Plate on orders. With such houses, of course, traveling agents, no matter how fine a line of samples they may exhibit, can make but little impression, since they come in competition with the very parties to whom they offer to make sales. While this continues it must act as a barrier to any very marked change in the present course of American trade. There are some lines of manufactures, however, which it seems to me, if the proper methods were adopted, might be very profitably pushed in this country.

AMERICAN RAILWAY ROLLING STOCK IN DEMAND.

Among these I would refer to the furnishing of stock to the Argentine railways. Besides the 2,000 miles now in operation there are nearly a thousand miles more in process of construction. Most of the latter are in the hands either of the general or of the Buenos Ayres provincial government; and the business of furnishing them with locomotives and the necessary rolling stock must amount to many hundreds of thousands of dollars in the course of the next year or two. There has always been a decided preference in this country for the American saloon-car over the English compartment-car, and if our car-builders are not too much occupied with home orders it might pay them to prospect a little in this direction. So also with our locomotives. They are, at least in point of style, a vast improvement on those which are now sent out here on orders from England or Belgium, and I believe if they could be introduced that their superiority would at once be apparent and would lead to their general use in Argentine railways. It is reported, indeed, in the newspapers, that Dr. Rodriguez, the new Argentine minister at Washington, has already given orders for twelve locomotives to different builders in the United States. Perhaps he has or could receive a commission for further orders and for rolling stock generally upon application.

AMERICAN MINING MACHINERY.

Another line of manufactures which it might be worth the while of our people to introduce here is that of mining machinery. There is no doubt that the interior provinces are underlaid with most valuable gold, silver, copper, lead, and other mineral deposits. There have yet been no official surveys to show their extent or richness, but within the last few years the mining industry of the country has received a consider-

able impetus, and the demand for mining machinery is every day increasing. Within the last year immense amounts of such machinery have been received here from France, and I hear of additional orders going forward to that country. I presume there is no country in the world whose miners have become more expert in their business, or whose inventive genius has discovered more successful appliances for extracting and securing the precious metals from the bowels of the earth than the United States, and it seems to me that we might, if proper means were employed, offer inducements to Argentine mining companies to obtain their machinery from us, on the score of its vast superiority. It is certain, however, that such orders will not go to us unless they are sought, and the facilities of our mining mills for doing their work fully set forth and explained.

MACHINERY FOR THE MANUFACTURE OF SUGAR.

Still another very valuable business, could we secure it, would be the furnishing of machinery for the manufacture of sugar. This industry has already reached very large proportions in this country, and in the provinces of Tucuman, Santiago del Estero, and Corrientes the number of acres planted in sugar-cane is every year increasing. There is no doubt that the Argentine Republic is destined not only to supply its own people with all the sugar they can consume, but to have a large surplus for export. The first sugar mills put up in Tucuman were purchased in England, but they did not give satisfaction, and all orders for such machinery now go direct to France, the mill manufacturers there having had the enterprise and smartness to send mechanics out with them to put them up and explain how the best results could be obtained from them. There is over a million of dollars now invested in sugar mills in the provinces I have referred to, but this is only the beginning of the demand which there must in the future be for this kind of machinery. As yet there is no refining establishment in the country, and there is no doubt that there is a splendid opening for such an industry. Whether the United States are to have any share in the development of the Argentine Republic in this particular remains to be seen. I have only been surprised that with the perfection we have attained in our sugar mills and refineries, we have not considered it worth while to seek their introduction in the River Plate.

DEMAND FOR STREET-RAILWAY CARRIAGES.

In the matter of cars for city railways, builders in the United States succeeded, for the reason that they could not then be furnished elsewhere, in securing the orders for the different lines which since 1869 have been opened in Buenos Ayres, and these orders in great part continue to go to New York. I have recently noticed, however, some very handsome cars which have been turned out from workshops in this city. But the business of stocking the various tramways of Buenos Ayres is an immense one. For its size, there is no city in the world which is so ramified with street cars. There are already about 150 kilometers of track laid in the streets of town and suburbs, and the number of passengers carried last year was over 20,000,000. Several new lines have just been projected, which will require running stock in the course of the next six months. I suppose the orders for these cars will go to the United States, unless the workshops here offer more favorable terms. The business is one which, if possible, we should seek to retain and increase.

AMERICAN COUNTRY WAGONS.

The other day I had an opportunity of inspecting a country wagon which was made in the United States, and which was sent down here as a specimen. It was of the style which in the Western States is called "prairie schooner," and attracted considerable attention from the Argentines, not only for its workmanship, but for its comparative lightness. From time immemorial the vehicles in use for carrying loads over the pampas have been the "bullock carts," immense things on two wheels, with bodies about 30 feet long, and so heavy that they are, even when empty, a good load for a yoke of oxen, but when duly loaded with hides or wool it requires three or four yoke to drag them. I do not know if it would be possible to convince Argentine campmen that the American wagon is vastly superior to these lumbering affairs, but if this could be done, when we consider the number of such vehicles used in the country, what an immense trade it would be to furnish the lighter article manufactured in the United States. Here is a chance for "Yankee" diplomacy and enterprise.

FENCING WIRE.

I have referred to the above lines of manufactures incidentally and because of the peculiar facilities which the United States have for furnishing them. Our manufacturers, however, have only to scrutinize the preceding lists of imports to Buenos Ayres to see how very many classes of goods and merchandise there are which the United States could supply so well, provided the course of trade already established with the European continent did not send all orders in that direction. One article I would especially call attention to, and that is wire fencing. Heretofore the cattle and sheep *estancios* of the Argentine pampas have been unfenced and open, but within the last few years, since the planting of cereal crops commenced, there has been a general movement in favor of fencing, for which purpose, in the absence of timber, steel wire is used, and almost the entire supply comes from France. In 1881 the official value of the wire brought into the country was $1,289,952, and for the year just ended the value of that discharged at the Buenos Ayres custom-house alone amounted to $992,376. This is only the beginning of a trade which can hardly be estimated, and of which the United States, if the proper effort were made, might secure a large share. A year or two ago a sample of American wire was on exhibition here, but it was not the style which is best adapted for sheep inclosures, from the fact that it was made with sharp barbs at intervals of a foot or two, which tear and seriously injure the wool, and it failed to obtain a market. The wire most favored is entirely smooth, and I think there would be no trouble in introducing such, provided its enduring qualities are equal to those of the French manufacture.

MISCELLANEOUS MANUFACTURES.

Among other articles which might be further pushed in this market I would mention cotton goods, printing paper, wall paper, cutlery, lamps, clocks, tools, brushes, windmills, pumps, glassware, &c., in some of which lines we already do a limited business.

GENERAL BUSINESS PROSPECTS.

I must say, however, that during the last year the general import business of the Argentine Republic was considerably overdone, and

large stocks in many classes of goods are still lying in custom-house deposits, awaiting a market. And it is in this matter that the English commercial houses of this capital have a decided advantage over other competitors for trade. Being most of them long-established houses, with large capital, they can thus afford to order in advance and hold to meet emergencies or a rising market, while other houses, not so situated, only order to meet present demands. The import trade of the last year was not, however, a profitable one, many establishments barely clearing expenses, while several which were of long standing and doing business on English and French account were obliged to succumb. This tendency to overtrading must be checked, or the country will encounter another commercial crisis somewhat similar to that which prostrated its prospects in 1873–'74.

The Government, however, is financially much stronger than it ever was before, and is so thoroughly giving its attention to the development of the resources of the interior and the advancement of all industrial pursuits that the prosperity of the country already seems abundantly assured, and these tendencies to overtrading, since they principally concern only the houses which are thus tempted beyond the limits of legitimate trade, will probably regulate themselves. Except for this small cloud in the commercial sky of the Argentine Republic, the outlook of affairs, commercially, financially, and politically, is generally quite hopeful, and business, it is generally believed, will be good during the year upon which we have just entered.

How much more of that business the United States would secure and hold were we not so unequally handicapped in the race for the control of the South American trade? But without extensive commercial connections, without direct banking facilities, without direct and regular steam communication, we cannot reasonably expect to very greatly increase the present volume of our commerece with the Argentine Republic.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, January 20, 1883.

ST. PAUL DE LOANDO AS A PORT OF CALL.

REPORT BY CONSUL DU VERGE.

The attention of owners, agents, and masters of American whaling vessels and others that come to this port and part of the coast is called to the facts that American whalers can enter this port without having to pay the exorbitant port charges they have to pay at other ports or places on the coast, the port charges being merely nominal of half a dollar per day for the custom house guard during the ship's stay in port.

Fresh provisions of almost all sorts can be obtained at the following prices, viz:

Fresh bread	per pound	$0 10
Fresh beef	do	15
Fresh mutton	do	18
Fresh vegetables	do	05
Fresh water	per ton	1 00

Fruits of many kinds very cheap; fresh fish very cheap. The whole delivered on board, if required, without extra charge. Wood, coal, &c., can also be obtained. Leave can be given to sailors without danger of their running away, as every assistance is rendered at once by the

authorities to arrest and place the runaways on board of their respective vessels. This is also the only place on the whole southwest coast that holds an American consul, so that every assistance can be relied upon in that respect.

Two hotels and several restaurants exist in the place, where decent meals and refreshments can be obtained; three or four billiard rooms and numbers of coffee-houses also exist.

Drafts on America can be negotiated on very reasonable terms. Whale-oil can be deposited in the custom-house free of duties and remain there for six months, paying only 2½ per cent. ad valorem. Stores of all kinds for whalers can be deposited gratis.

Should any American vessels come especially with stores for whalers, everything can be transferred free of duty, either import or export.

Cabendas and other men can be obtained for any whalers or trading vessels requiring sailors.

There are also two large hospitals in the place, where men can be properly attended to for about 50 cents per day.

At the Government's public works all kinds of repairs can be done on ships, &c.

The harbor is the only good and safe one of the whole coast, perfectly landlocked, and where the assistance of a pilot is not required.

In the harbor fish abound. Communication with England via English mail steamship every month, and with Lisbon also every month by Portuguese mail steamships, but these steamers are not running on time.

L. DE R. DU VERGE,
Consul.

UNITED STATES CONSULATE,
St. Paul de Loando, December 18, 1882.

PRICES OF PROVISIONS IN MUNICH, 1883.

REPORT BY CONSUL HARPER.

Provisions.—Fattened ox meat, 16 cents per pound; fattened cow meat, 14 cents; veal, best quality, 16 cents; medium quality, 13 cents; mutton, 12 cents; pork, raw, 17¾ cents; smoked, 23⅛; hogs' grease, 19½ cents per pound; ox tongue, raw, 72 cents; tallow, dried, $7.62 per 100 pounds; candles, 14½ cents per pound; soap, 9½ cents per pound; melted butter, medium quality, 22 cents; best quality, 25 cents; mountain table butter, medium quality, 23 cents; best quality, 27 cents; basket butter, medium quality, 23 cents; best quality, 25 cents per pound; eggs, fresh, 16 cents per dozen; hens, old, medium quality, each, 31 cents; best quality, 58 cents; pullets, medium quality, 29 cents; best quality, 43 cents; turkeys, medium quality, $1.19; best quality, $2.30; capons, medium quality, 84 cents; best quality, $1.07; geese, medium quality, $1.19; best quality, $1.44; goose entrails, medium quality, 28½ cents; best quality, 31 cents; ducks, medium quality, each, 72 cents; best quality, 84 cents; ducks' entrails, medium quality, 9½ cents; best quality, 11 cents; pigeons, each, medium quality, 9½ cents; best quality, 17 cents; sucking pig, medium quality, $1.19; best quality, $1.90.

Bread stuffs.—Wheaten bread, per roll of $\frac{4\frac{1}{2}}{500}$ pound, ¾ cents; per loaf of $\frac{4\frac{1}{2}0}{500}$ pound, 3 cents; per loaf of $1\frac{7\frac{1}{2}}{500}$ pounds, 6 cents; per loaf of $3\frac{1\frac{1}{2}}{500}$ pounds, 10 cents; housebread, per 1 pound, first quality, 4 cents; second quality, 2¾ cents; housebread wedge, 1 pound, first quality, 4½ cents; second quality, 3¾ cents; wheaten meal, No. 1, per pound, 6½

cents; No. 2, 5¼ cents; No. 3, 4½ cents; No. 4, 4 cents; No. 5, 3½ cents; rye meal, No. 1, 4½ cents; No. 2, 4 cents.

Beer and other liquids.—Winter beer, per quart, 5¾ cents; summer beer, 6¼ cents; white wheaten beer, 4¾ cents; beer vinegar, 2⅓ cents; cherry brandy, 68 cents; good milk, 4½ cents; good cream, 14¼ cents; cider-vinegar, 4½ cents; mead, 21 cents; brandy, 19 cents; common, 10 cents; petrol, 6 cents; linseed oil, 19 cents; rape oil, 21 cents.

Fruits and vegetables.—Potatoes, 75 quarts, $1.30, medium quality; $1.37, best quality; apples, 18¾ quarts, medium quality, $5.24; best quality, $5.71; dried plums, per pound, medium quality, 5½ cents; best quality, 7¼ cents; dried cherries, per pound, medium quality, 12 cents; best quality, 14¼ cents; turnips, two quarts, medium quality, 2½ cents; best quality, 3½ cents; Bavarian rape, two quarts, medium quality, 2½ cents; best quality, 7¼ cents; carrots, two quarts, medium quality, 3½ cents; best quality, 4¾ cents; onions, two quarts, medium quality, 7¼ cents; best quality, 8½ cents.

Fish, &c.—Carp, per pound, medium quality, 19 cents; best quality, 23¾ cents; pike, medium quality, 23¾ cents; best quality, 28½ cents; turbot, medium quality, 33⅓ cents; best quality, 40¼ cents; trout, medium quality, 64¼ cents; best quality, 71¼ cents; eels, medium quality, 47¾ cents; best quality, 57¼ cents; barbel-fish, medium quality, 14¼ cents; best quality, 19 cents; ray, medium quality, 11¾ cents; best quality, 16½ cents; rambler fish, medium quality, 35¾ cents; best quality, 40¼ cents; brook fish, medium quality, 4¾ cents; best quality, 7½ cents; crabs, per 25 pieces, medium quality, 35¾ cents; best quality, 47¾ cents; frogs, per dozen, medium quality, 7¼ cents; best quality, 14½ cents.

Hay and straw.—Per 100 pounds hay, medium quality, 63¾ cents; best quality, 74¼ cents; after-grass medium quality, 55¼ cents; best quality, 63⅓ cents; rye straw, medium quality, 34¾ cents; best quality, 39¾ cents; machine straw, 23¾ cents; oat straw, medium quality, 24¾ cents.

Wood, coal, and turf.—Per one-third cord, beech wood, medium quality, $2.22; best quality, $2.45; birch wood, medium quality, $1.90; best quality, $2.07; pine wood, A, medium quality, $1.66; best quality, $1.74. One hundred pounds coals, medium quality, 26 cents; best quality, 28¾ cents; brown coals, per 100 pounds, medium quality, 24¾ cents; best quality, 26 cents; pine coals, per cubic meter or 1,000 quarts, $1.66, medium quality; $1.79, best quality; beech coals, medium quality, $3.33; best quality, $3.57; turf, per 100 pounds, medium quality, 12 cents; best quality, 19 cents.

Bavaria is not favorable for raising poultry. The chickens are small, with but little meat upon them.

Turkeys are scarce, and what there are on sale are very dear.

I think that with proper exertions American poultry, particularly chickens, turkeys, prairie hens, &c., at a fair price, would find a satisfactory market here.

The sale of canned goods of first class quality could be largely increased.

Salt and dried fish, boiled lobsters, Stewart's syrip, dried and preserved fruits, &c., would also have a ready sale in this market at reasonable prices.

I have no doubt but that an intelligent and efficient agent here could build up a profitable business on the above and similar articles.

JOSEPH W. HARPER,
Consul.

UNITED STATES CONSULATE,
Munich, February 21, 1883.

AGRICULTURAL EXPOSITION IN LISBON.*

REPORT BY MINISTER FRANCIS.

The Royal Portuguese Association of Agriculture, under the sanction and with the financial assistance of the Government, will open at Lisbon, during the month of May next, an exposition which will have especially in view the collection and comparison of all wines of Portuguese production, with the object of establishing what qualities are best adapted for exportation. Within the scope of this exposition are, moreover, embraced all the productions of the soil of Portugal. It will be presided over by His Majesty Dom Fernando, assisted by a body of men comprising the best intelligence and ability of the kingdom.

I have been requested to extend invitations to citizens of the United States, inventors of implements of agriculture, manual or power, to send specimens of their manufactures for trial, competition, and premium. All such articles will be conveyed at the cost of this Govèrnment to Lisbon from the ports of London, Havre, Bordeaux, and Antwerp, and placed upon the ground free of expense to the owner, and will be returned in like manner at the close of the exposition. Should the transportation of such exhibits involve the employment of the Portuguese railways, no charge will be made for their use either for the machines or persons accompanying them.

The following are the names of the shipping agents of the Portuguese Government at the ports above referred to: London, John Hall & Co.; Antwerp, E. J. Isembert; Havre, Fehr & Co.; and at Bordeaux, Preytz & Co.

This, the first effort of Portugal in a similar direction, is exciting great interest and attention throughout the kingdom, especially among its agriculturalists, to whose interests it is mainly addressed, and it will be the first opportunity which has ever been offered to bring perfect agricultural implements and machinery, adapted to cultivation under similar conditions, to the personal attention of those in Portugal interested in their use.

The committee are particularly desirous to receive all improved forms of the hand-plow, and all tools and implements adapted to husbandry, especially such as are adapted to the culture of the vine, with implements for grafting.

Specimens of American vine cuttings are solicited.

Special provision will be made for the installation, exhibition, trial, and competition of cultivators, reapers, harvesters, &c., and for all improved water-wheels, turbines, windmills, hand and power pumps, irrigating and all other hydraulic machines.

Rural constructions in wood, comprising cheap and convenient houses for workmen, carts for farm use, methods for the care, preservation, and clearing of woodlands; the whole of the means and appliances used in apiarian culture, and the whole series of preserved food, both vegetable and animal; and every variety of churns, and also cheese-making machinery.

Application for space should be immediately made to Mr. Antonio

* The substance of this report was given to the press immediately upon its receipt at the Department.

Augusto de Aguiar, president of the executive committee, Lisbon, or to Mr. Antonio Batalho Reis, secretary, Lisbon.

The exposition will be organized in buildings to be specially constructed for the purpose in the Royal Park of the Ajuda, near this capital. These, it is hoped, will be completed for the inauguration on the 20th of May, the date now fixed for that ceremony.

All goods intended to be exhibited at this exposition will be admitted free of duty, and so remain while on exhibition.

JOHN M. FRANCIS.

LEGATION OF THE UNITED STATES.
Lisbon, Februdry 15, 1883.

NAGASAKI INDUSTRIAL EXHIBITION.

REPORT BY CONSUL JONES.

A very interesting and the first industrial exhibition held on the island of Kiu-Shiu (Kew Shew) was held at Nagasaki October 1, 1882, and was represented by the exhibits of the products of six provinces, viz, Nagasaki, Higo, Satsuma, Chikugia, Oita, and the Loo Choo Islands. The mine provinces of the island were invited to participate, but only the six above mentioned were represented. The others were prevented by the want of time and organization.

The consuls of the treaty powers were invited by the governor of Nagasaki to be present at the opening ceremonies, at the Korkin-Kwan (the palace of friendship), and were received at the entrance doors by the governor and the officers of the exhibition, and conducted to the guests' reception room.

After a half hour spent in the exchange of courtesies, the company proceeds to the main chamber of audience, a handsome, large, oblong room, without chairs or seats of any kind, where the consuls were accorded places on the right of the governor, who stood behind a small table at the head of the chamber, the representatives of the provinces and other officials being ranged standing in line around the other three sides of the chamber.

The Japanese were in their native official costumes, which had a peaceful and picturesque effect. The governor addressed a few words of greeting to the assembly in their native language, at the conclusion of which all bowed to the floor in acknowledgment. Then, one by one, the representatives advanced to a small covered table in the center of the chamber, and, facing the governor, touched their foreheads to the table, drew from their breasts long rolls of paper, from which they read their congratulations, and again touching their foreheads to the table, retired to their places. This ceremony occupied some time, at the conclusion of which the governor declared the exhibition now open, and the company, with strict order of precedence, proceeded to the exhibition building, situated within the same grounds, and passed from space to space in examination of the exhibits. These were arranged in departments and displayed with great neatness and taste.

The exhibition of products consisted of tea, sugar, rice, tobacco, cotton, wax, and silk. In each of these departments there were exhibited, for example, the sugar-cane, the crude sugar, the refined sugar, the implements of cultivation, and the simple machinery of the country for its manufacture.

The exhibition was in all respects most creditable, and the products displayed would compare favorably with those of our more advanced system of cultivation.

The implements and machinery, though simple and mostly of the most ancient pattern, were ingenious and of the best workmanship.

The display of teas was very interesting, and of the leaf in different stages of growth, many grades of black and green teas, the tea dust, and the brick tea, and wooden models of tea-houses, frying-pans, sieves, &c. The tea plant is grown in all parts of Kiu-Shiu, generally in small plantations of an acre or two, and the decoction is the common and favorite beverage of the people. They drink it hot, from tiny porcelain cups, without milk or sugar. In a Japanese house the tea-kettle is always on the fire, and the guest, on entering, is immediately proffered a cup of tea, which one soon learns to like as a palatable and refreshing drink.

The sugar-cane, which was mostly the product of the province of Satsuma, does not attain the size and growth of that of Louisiana, in the United States, but the sugar appears to be rich in saccharine matter and is very agreeable to the taste. The Loo Choo Islands also made a fine exhibition of sugars, but the Japanese people do not yet understand the proper method of refining it. As made by them, the sugar is very dark, like rough maple sugar, though scarcely so inviting in appearance. It is used only in making cakes and candies, of which the people are very fond.

The rice department was very full. As rice is the chief article of food of the people, much attention is paid to its cultivation.

The cotton of Japan is what is known as the short staple of the United States, and is grown in all the provinces of Kiu Shiu. The display of this at the exhibition was very good, from the seed and plant to the finest of the cotton fabric. At Kumamoto, in Higo, a cotton manufactory has recently been established, where hundreds of young women are employed at the looms. Usually, cotton goods are made by the women of the family, for their own use, and by the earliest known method. These cloths are often very pretty in texture and design. The Japanese have the art of dyeing cloths to rare perfection, especially in blue and red colors, which are brilliant and beautiful.

The specimens of tobacco on exhibition were very good; much of it from seed from the United States. The best is from Satsuma and Higo. It is manufactured with fine-cut smoking tobacco.

The Japanese are inveterate smokers, men and women. Their pipes, however, are very small, the bowls holding tobacco sufficient only for a single whiff. The cigar and the cigarette have not yet come into general fashion with them.

The wax department displayed vegetable wax molded into various shapes, and as white as Parian marble; wax candles of several sizes and shapes, some of them beautifully painted for their temple services. Before the introduction of kerosene oil, wax candles were in general use. The wax tree, from the berry of which the wax is made, grows in abundance in this part of Japan.

The most interesting part of the exhibition was the silk department, which was very rich in its displays, from the mulberry leaf to the lustrous fabric. Much attention is given to silk culture in Japan, and the silks are daily becoming more popular in the markets of the world. They have not the warp and woof of Lyons silks, but they are very light in texture and very beautiful in color and luster, and very cheap in price, advantages not to be overlooked by the purchaser.

After a very thorough examination of the different departments of the exhibition, the company, by invitation of the governor, repaired to the palace, where they were entertained at an elaborate luncheon, about one hundred guests being at the table. The governor, in a happy speech, congratulated the representatives of the provinces and Kiu-Shiu upon the success of the exhibition; and, among other things, was pleased to say that he was indebted to the American consul for many valuable suggestions which greatly contributed to the success of the undertaking. In reply to a toast offered by the governor, I expressed my surprise and gratification at the great success of the exhibition, and ventured the suggestion that at future exhibitions their scope be enlarged, and that stock and poultry, cereals and vegetable productions, machinery, art, &c., be admitted, and that discriminating rewards for excellence in the way of premiums be awarded, which suggestions were afterwards adopted.

I trust I may be pardoned for mentioning that, at the conclusion of my remarks, the governor took a beautiful silken Japanese flag from the ornamental center-piece of the table, and, amidst the flattering applause of the company, presented it to me.

ALEXANDER C. JONES,
Consul.

UNITED STATES CONSULATE,
Nagasaki, January 13, 1883.

THE POTTERS OF TUNSTALL.

REPORT BY CONSUL LANE.

The Tunstall manufacturers have to meet at home an annual agitation for an increase of the wages of labor, and abroad a steadily growing competition. It is the belief of a few that wages and prices might be simultaneously advanced, with corresponding benefits to both masters and workmen, but the manufacturers generally believe any immediate advance in prices to be impossible.

Consequently, although the workmen have generally given notice that at the coming Martinmas an increase of wages will be demanded corresponding to the reduction made by the adverse award of 1880, the masters in several instances have given counter notice that a reduction will be made. At a largely attended meeting of the Manufacturers' Association, held on the 9th instant, the association declined, on account of insufficient time before the hiring season, to entertain at present the subject of reorganizing the board of arbitration which was broken up by the strike of last year. They also unanimously adopted the following resolution:

> That, considering the present selling prices and the state of the trade generally, this meeting is unanimously of opinion that an increase in workmen's prices cannot possibly be made.

It is quite evident, therefore, that there will be no advance, and on the other hand there is scarcely a probability that an increase will be insisted upon to the extent of a strike. It is also reasonably certain that any scheme for augmenting the manufacturers profits by a reduction of wages is too impracticable to be hoped for. As a general rule, the workpeople here accumulate very little, if anything, and to further curtail

their means of living, particularly at this season of the year, would be an actual hardship. It would seem, therefore, that if the American trade is to become more profitable, it must be by an advance in prices or some means of cheapening production not yet available. Through long experience and systematic business training and habits, every vantage point in the potting industry has been thoroughly mastered by the manufacturers of this country. New discoveries and inventions must be relied upon to reduce the cost of production. As to more remunerative prices in the future, the growth of the industry in the United States is a constant source of much interest, not to say uneasiness; and it is scarcely necessary to add that herein hope is chiefly dependent upon a possible material reduction in the import duties now levied by our Government.

It is the opinion of many—the question of wages and raw materials aside—that a permanently successful management of the pottery manufacture on extensive and varied lines can only come through long experience and close study, generations of which it has taken to build up the now powerful position of the Staffordshire potteries.

There are also some details affecting the question, in which it is claimed that England must have a permanent advantage over the United States, such as a more equable temperature, &c. I have taken occasion, so far as I deemed expedient and practicable, to obtain the views of well-informed parties here upon some of the comparative disadvantages at present attending the manufacture of American pottery, and although I am unable to say to what extent they are correct, I consider them of sufficient importance to embody in this report, to the end that whatever is in them of value may be utilized by our home producers. As to materials, I am told that the clay as now used in the United States is deficient in tenacity and liable to work short, or "curl," as the potters call it; that the feldspar which is used in lieu of Cornish stone is of a more vitreous nature, contains more water, is liable to contract more in firing, and works much shorter.

It is believed by one informant that the water used at Trenton has an unfavorable influence on the working of the clay, for what reason I have been unable to learn.

As to other matters, it is believed that the firing in the biscuit is not so skillfully performed as here; that, owing to unskilled labor being employed, the loss out of each oven is greater in proportion to the good; and that the American workmen are not so particular in finishing their work off as they are here, where they are paid "good from hand."

It is said that most of the ware is made much thicker and is more liable to contraction in firing; that owing to the body being closer than English earthenware, although not fired so hard in the biscuit, the glaze has to be used thicker than it is here; is, therefore, not so transparent, and does not so well suit colors used for printing under glaze; that the cost of assistants is greater in the United States than here, where women do the work done there by boys, and that the latter do not exercise the same care in their work that women and girls do here; that the climate at times has a powerful influence both on the workmen and materials, making the clay more difficult to work, and in very hot weather rendering it impossible for the potter to do justice to his work; and that since the increased demand for decorated ware, American manufacturers are at a disadvantage in a deficiency of skilled workmen. The remedies for the disadvantages mentioned, if they exist, will doubtless suggest themselves, but I may add my indorsement to what seems to me a wise suggestion, viz, that the relative merits of Ameri-

can and English clays be thoroughly tested by chemical analysis. It is also stated that the use of Cornish stone instead of so much feldspar would have a beneficial influence on the working and contraction of the clay; that more attention should be paid to firing; and that placers should be encouraged to be very particular in their department. The same remarks apply to glost ovenmen. That greater pains should be taken to encourage American workmen to take a pride in the quantity of good ware they produce. It is claimed that by the addition of Cornish stone to the native clays the ware could be made thinner.

EDWARD E. LANE,
Consul.

UNITED STATES CONSULATE,
Tunstall, October 17, 1882.

STATISTICS OF ST. PETERSBURG.

REPORT BY CONSUL-GENERAL STANTON.

According to the census of 1881 there were in St. Petersburg—

Description.	1869.	1881.
Building lots	8,242	9,497
Buildings:		
Stone	9,980	10,929
Wood	9,482	9,313
Mixed	501	913
Apartments	86,940	131,095
Inhabitants:		
Males	377,380	475,138
Females	289,827	386,782
Total	667,207	861,920
Number of women to every 100 men	76.80	81.41

Increase of population since 1869, 29.04 per cent.

St. Petersburg covers an area of 9,540 desiatines (25,758 acres). It is inhabited by 861,920 persons, 475,138 males and 386,782 females. The average increase of the population during the last twelve years (1869–1881) has been 2½ per cent.; the increase being larger among females than males.

The illegitimate births have greatly increased, rising from 4,143 in 1868 to 6,774 in 1880; that is, from 23 per cent. of the total births to 27 per cent.

The number of marriages increases very slowly, while their prolificness decreases. The natural annual movement of the population of St. Petersburg shows a decrease of one-third per cent., so that the actual increase is due to immigration.

The conditions of life in St. Petersburg, aside from the swampy ground on which it stands, are most unfavorable. A fourth of all the houses have their cellars and one-third of them their garrets inhabited. The greatest poverty and squalor abound in its suburbs. Apartments of one and two rooms form the third part of the lodgings existing in the capital. The physical constitution of the young men of St. Petersburg is very poor. Half, only, of those liable to military service come up to the standard required.

Of the patients treated in the hospitals 10 per cent. (or annually 10,000) are venereal. The total attendance at the hospitals is 110,000, so that every eighth person may be said to be a hospital patient.

Typhoid and scarlet fevers and diphtheria may be said to be endemic. At the present date the latter disease is particularly malignant, 47 per cent. of the cases proving fatal. The death rate increases annually.

The annual rental, calculated on 64,424 lodgings in 1869, has risen from $4,350,000 in that year to $15,500,000 from 74,462 lodgings in 1881. The average rental per lodging has risen from $153 to $207, although it is estimated that at the present moment more than 17,000 lodgings are empty, and business is in general in a most depressed condition.

But scanty and disconnected data exist of St. Petersburg's trade and industry. In 1881 there were 22,139 trading establishments and workshops; of which 6,675 were artisans shops, and 386 large mercantile houses. Of the latter, 368 were private establishments, employing 64,698 hands (9.2 per cent. minors), and 18 were Government works, employing 9,428 hands (7.8 per cent. minors).

Classified according to their number and the number of their employés, come first, brass foundries and mechanical trades, with 62 shops and 16,708 hands; then cotton mills, with 30 mills and 16,418 hands; then tobacco mills, with 21 mills and 7,573 hands; then follow breweries and distilleries.

Among the important branches of St. Petersburg's trade should also be mentioned the chemical industry, the tanneries (19), the India-rubber works, metallic works, brick works, and textile works, other than cotton mills.

The carrying trade of the city is done by 880 firms, employing 12,840 drivers, 6,295 laborers, and 13,638 horses.

The tramway system, which is extensive, is in the hands of three companies, but one of which publishes any statistics. The business of this company on the 27 lines belonging to it is shown in the following table:

Year.	No. of trips.	No. of versts.	No. of persons.
1878	1,286,192	5,126,680	33,537,681
1880	1,305,097	5,312,490	32,897,849
1881	1,320,916	5,243,244	28,913,435

Notwithstanding the increased number of trips, the number of persons carried has decreased from year to year. The income, however, owing to increased rate of fares, has advanced, the daily receipts of a car rising from $10.53 to $11.20.

Within the last year the Bell telephone system has been introduced into St. Petersburg, and is now, I am informed, in successful, operation.

EDGAR STANTON,
Consul General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, December 6, 1883.

EXPORTS FROM THE PHILIPPINES.

REPORT BY ACTING CONSUL KLINCK UPON THE COMMERCE OF MANILA, PHILIPPINE ISLANDS, FOR THE MONTH OF DECEMBER, 1882.

EXPORTS.

Sugar.—The demand for San Francisco has continued to keep up prices, and dealers will not contract to-day. The weather during the past fortnight has not been favorable for sun drying, and the dealers are, in consequence, afraid to enter into more engagements at present for February delivery. New sugar continues to come in slowly, and the season will be at least a month later than usual in opening.

Hemp.—The market is cleared, and there are buyers to arrive at quotation.

Cigars.—The Government factories close to-day for good, and those of Malabon (Princesa), Meisie, and Cavite open on the 2d proximo under the management of the "Compania General de Tabcos." The old Government brands will continue to be made there at about the Government prices for the present, but now that the monopoly has ceased, the price will be governed by the demand and the supply of leaf. The new company will make a number of fancy brands from "Imperiales."

Leaf tobacco.—A sale is on to-day without any reduction in upset prices, which precludes the possibility of business for exports.

Statement showing the quantity, value, and duties of the principal articles of export during the month of December, 1882.

Articles.	Quantity.	Value.	Duties.
Hemp ..... kilograms	5,717,616	$853,964	$11,435 23
Cordage ..... do	29,380	7,325	58 76
Indigo ..... do	2,050	2,100	20 50
Liquid indigo ..... do	72,019	3,620	72 01
Rice ..... do			
Sugar ..... do	7,812,363	474,318	10,937 31
Coffee ..... do	954,096	144,306	2,862 29
Sapan wood ..... do	265,837	5,805	106 38
Total		1,491,438	25,492 43
Total for preceding year		369,311	6,803 56
Increase		1,122,127	19,688 87

CHAS. KLINCK,
Acting Consul.

CONSULATE OF THE UNITED STATES,
Manila, December 31, 1882.

POISONED SNUFF.

REPORT BY CONSUL STEVENS, OF SMYRNA.

I deem it my duty to communicate to the Department the inclosed translation of a letter recently received at this consulate, and written in French by a medical officer of the Austrian navy. The information

it contains is highly important. Inquiry since its receipt has convinced me that the evil of which it complains exists here, and there is also reason to fear that some of the poisoned snuff finds its way to the United States. It is well, therefore, to put American dealers in and users of snuff upon their guard.

I supplement this letter with a few facts bearing upon the same subject.

Since the establishment of the tobacco monopoly in Turkey, snuff may be said to be one of the several articles that undergo the most unscrupulous adulteration. Owing to the high amount of duties imposed on tobacco by the Turkish Government, and the large profits licensed manufacturers expect to make on the same, the poorer classes cannot afford to use the products of doubtful purity coming from the factories, and so are altogether at the mercy of the clandestine manufacturer and retailer, who, in order to make the most he can of his vile industry, adulterates his snuff to such an extent that it can be safely said that his products contain on an average from 60 to 70 per cent. of inferior Persian tobacco (tumbeki), fragments of country tobacco leaf, and tobacco of cigarettes picked up in the streets by beggars, the 30 to 40 per cent. consisting of walnut sawdust, terra umbra, fine sifted sand, and scum of lead (oxide of lead), covered with inferior black writing-ink.

The snuff is manufactured in Smyrna, as follows:

The conscientious manufacturer uses Persian hookah tobacco (tumbeki), and the fragments of country tobacco leaf colored with black ink. These tobaccos, ground as fine as possible and mixed with grape molasses are put in a covered barrel to ferment. Two or three days later the snuff is taken out and spread in the sun to dry partly, and then rubbed with the hands and passed through iron wire sieves to be granulated.

The product is afterwards scented with powdered orris root, tonka beans, and oil of geranium; the superior qualities are scented with essences of roses and jessamine and put up in packages.

The adulterated article is manufactured in the same manner with the addition of the above-named substances.

The only persons using genuine snuff in this city are the Catholic priests, who import it directly from France, Italy, Spain, and Holland, and enjoy the privilege of paying no custom-house duties.

W. E. STEVENS,
Consul.

UNITED STATES CONSULATE,
Smyrna, January 15, 1883.

[Inclosure in Consul Stevens's report.]

Dr. Paulay to Consul Stevens.

DIGNANO IN AUSTRIA, *December* 3, 1882.

Towards the end of last month I happened to be present when a seaman of the Austrian frigate Landon offered for sale to an officer of the garrison, two packages of snuff. The seaman stated that this article had been taken on board by a retailer when the frigate was in the port of Smyrna, and that the crew thinking that the snuff was of a superior quality and moderate price, made an ample provision of same, either for sale or for presents to their friends at home.

For reasons to be stated hereafter, I made to the officer the proposition to allow me to analyze the snuff before using it, and having obtained the seaman's permission, I performed the operation as follows:

The quantity of two grams of snuff was burned, the ashes mixed with diluted nitric acid and the solution filtered through Swedish paper. The liquid put in a test tube

and mixed with sulphuric acid, yielded an abundant white precipitate; another portion of the same tested with hydrosulphuretted water, gave an abundant black precipitate. These results, explained according to the rules of chemistry, indicate that the snuff contains a large quantity of lead.

The use of such a snuff is always attended with a serious illness, lead colic.

This painful disease lasts during months and years, destroying the whole organism, causing palsies and other grave symptoms, and after terrible sufferings leads even to death. It is the more malignant as physicians are sometimes at a loss to account for the cause of all these evils (who would have ever thought that snuff was the source of illness in two of my patients, a lady and a cook), and for this reason they are unable at first to employ the proper treatment for an illness that may prove fatal, as in my experience this has been the case in two instances. Having had occasion during the last three years, within the restricted number of my patients, to deal with three cases of this disease, I always traced it back to the use of Smyrna snuff, adulterated with lead, and now for the fourth time detecting by chemical analysis this poison in the article manufactured at Smyrna, I can say with certainty that this infamous adulteration has been carried on in that city extensively and for a number of years.

The dangers attending the exportation of this article are the more serious as it daily increases. The poor seaman who was not in a position to buy at Smyrna carpets and other precious articles, eagerly spent his money for that article, either for speculation or for presents at home to his father, uncle, or the curate of his village, thus spreading a poisoned drug.

I am of the opinion that were the qualities of this adulterated article known its sale ought to be forbidden. My discovery was fully confirmed by the navy-yard chemists at Pola, who detected in Smyrna snuff the enormous quantity of 2¼ per cent. of metallic lead. On account of the frequent commercial relations between Smyrna and several ports in the United States, I think it my duty as man and physician to inform the consul-general of the aforementioned circumstances, in order that such steps may be taken as will be a safeguard against the evils that threaten the life and health of his fellow-citizens.

DR. ETIENNE PAULAY,
Naval Physician.

COMMERCE AND SHIPPING AT GIBRALTAR.

REPORT BY CONSUL SPRAGUE.

SHIPPING.

During the quarter ended December 31, 1882, 1,330 steamers and 186 sailing vessels of all nationalities entered this port, of which 1,006 steamers and 77 sailing vessels were under the British flag.

I have to report an entire nullity as regards American shipping at this port during the above period, only one solitary American merchant vessel having appeared, and that wind-bound.

Eighty-three foreign steamers put into this port to coal, bound for ports in the United States, of which 74 were British.

COMMERCE.

The commercial operations during the past year show no improvement in the general trade of this port connected with the United States.

Imports from the United States.—A falling off is perceptible of tobacco and petroleum from the United States, while those of breadstuffs have not increased, no doubt on account of the quantity of flour which is being constantly imported by steamers direct from Marseilles at a moderate cost.

Indian wheat.—Several unusual large cargoes of Bombay hard wheat, direct from India by steamers through the Suez Canal, have also entered. The greater portion of these importations have already been transported to Spanish markets both by land and by sea. Further

supplies are still arriving from the same quarter. The low cost of this description of wheat permits it to compete with Spanish descriptions, even with the import duty imposed upon it, as it forms an excellent substitute in times of scarcity.

Agriculture.—Rains having last month succeeded a prolonged season of drought, agricultural pursuits are now being carried on with much activity throughout this immediate neighborhood, giving hopes for favorable results from the extent of land already sown, which greatly decreased any likelihood of Spain admitting foreign cereals at any deduction on the present ruling duties. Prices have in consequence declined in this market, which rather discourages the importation of American flour, at present abundant.

Military.—With regard to the military improvements that have taken place within this fortress, I may record the recent safe landing at the dockyard of a 100-ton gun direct from Woolwich, for the mounting of which on a very commanding position the necessary preparations are now going on, and it is reported that another piece of ordnance of the same caliber will shortly follow.

HORATIO J. SPRAGUE,
Consul.

UNITED STATES CONSULATE,
Gibraltar, January 3, 1883.

FRENCH AND ENGLISH SILK TRADE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The silk condition house of Lyons received and registered during the year 1882, 2,156,856 kilograms of silk, divided as follows: Organzines, 1,326,817 kilograms; trams, 830,039 kilograms.

For the same period during the two preceding years the figures were: Organzines, 1880, 1,382,488 kilograms; 1881, 1,498,327 kilograms; trams, 1880, 768,955 kilograms; 1881, 983,043 kilograms; total, 1880, 2,051,443 kilograms; 1881, 2,481,370 kilograms.

The amount of silk dyed (not including dyed piece goods) during 1882 was as follows: Dyed black, 985,000 kilograms; dyed in colors, 905,000 kilograms; total, 1,800,000 kilograms; against, in blacks, 1880, 945,000 kilograms; 1881, 1,100,000 kilograms; colors, 1880, 900,000 kilograms; 1881, 975,000 kilograms. Total, 1880, 1,845,000 kilograms; 1881, 2,075,000 kilograms.

There has been no improvement in the market since the commencement of the year. In fact, both in European as well as Asiatic silks there has been a decline of from 10 to 20 cents per kilogram. Though this may seem slight, it is, considering the extremely low price of the article, a discouraging indication, and when viewed in connection with the paucity of spring orders, and the uncertainty as to the future, a serious affair for the manufacturing interests of the city.

Another reason for the present depressed state of the market lies in the still undecided question of the American tariff. Every one is asking, will the present 60 per cent. duty on silk goods be reduced, and, if so, how much, and when? Will it be by the present or by the new Congress? Naturally there is great trepidation as to shipments. Of course I do not assume to reply to these numerous inquiries, except by the general answer that there will undoubtedly sooner or later be a reduction; adding, how

ever, that I have every reason to believe, both for the sake of American manufacturers and importers, the reduction will be made gradually, that no serious disturbance may be produced.

In its annual trade review for the past year the London Times has the following article on silk, furnished by a leading authority, which I have thought might be of interest and give the English view:

SILK.—The year just closed has been trying and disappointing; the continuance of the prosperous trade which prevailed at its commencement was checked in the middle of January by the financial troubles (caused by stock exchange speculations) in Lyons and Paris, and shortly these became sufficiently serious to disorganize the whole of the continental silk trade. During some time our market, sustained by the sound position of hon e manufactures, resisted the depression, but eventually prices became weaker and a dragging business ensued, which continued throughout the spring, even the most unfavorable accounts of the Italian crop failing to produce any decided improvement. Towards the end of May telegrams from Shanghai were received reporting that the supply for the new season would again be small, and might probably not exceed those of 1881–'82. Upon this news "blue elephants," previously unsalable at 16*s.* 6*d.*, at once advanced to 17*s.*, 9*d.* but the movement was short-lived. Later telegrams became more contradictory, and the rise was as rapidly lost. After the June sales a further decline took place, and in August the same crop was sold at 15*s.* This was the lowest point, and in September, when renewed statements were made as to the deficiency of the China crop, an improvement in the price of Tsatlees was obtained, which, with slight fluctuations, has been maintained.

During the last few weeks a more hopeful feeling has existed, and there have been signs of a more extended business, checked recently, however, by the general bad weather and the usual stock-takings. The hesitations producing a restricted business throughout the year, must be attributed in some degree to the more than ordinary fickleness of fashion. The exceptional circumstances of the year have borne heavily upon China silk, which, owing to the limited demand of throwsters, has had some severe intervals of depression. Since April a gradual and uninterrupted decrease in the stock has taken place, and it is now at the lowest point known for many years.

Japans have suffered severely from the competition with continental silks, which have been persistently pressed for sale at extremely low rates, but since the last two months a better demand has sprung up for medium to good Maibash, and some large sales "to arrive" have been made. More recently the lower sorts have also been in demand.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, January 16, 1883.

SILK MARKET OF LYONS.

REPORT BY CONSUL PEIXOTTO.

The silk market of Lyons for the past week has been weak and irregular, with very light transactions. Raw silk continues feeble as to price, with a tendency to increased feebleness. Grèges of Cevenes are quoted, first order, 12–16, at 64 francs the kilogram; grèges of Italy, tied knots, first order, 11–13, at 59–60 francs the kilogram; grèges of Brousse (native), first order, at 56 francs the kilogram; grèges of Japan, first order, at 55 francs the kilogram; organzines of France, second order, 20–24, at 64–65 francs the kilogram; organzines of France, second and third order, 22–24, at 62 francs the kilogram; organzines of Piedmont, second order, 20–22, 23–25, at 66–67 francs the kilogram; organzines of Italy, first order, at 67 francs the kilogram.

The market for Asiatic silks has been insignificant, owing to refusal of holders to concede to the demands of buyers for reduced prices.

MANUFACTURED GOODS.

Quite a large number of English buyers have been in the market during the past fortnight, but their purchases have been without importance, and manufacturers are still in the dark as to what styles fashion will designate for the next season.

The imports of silk goods into England for the month of December amounted to £632,258, against £758,262 for 1881 and £712,518 for the month of December, 1880. The total imports of silk goods into England for the past three years have been as follows:

1880	£13,321,489	$64,829,0[illegible]
1881	11,699,667	56,936,[illegible]
1882	11,172,725	54,372,0[illegible]

During the same years the imports of silk goods into the United States are given as follows:

1880	$33,305,4[illegible]
1881	31,636,3[illegible]
1882	38,634,0[illegible]

It is important to notice these changes. The decrease in the imports of England and the increase in those of the United States, while they may aid to equalize the declining manufactures of Europe, are not calculated to improve the prosperity of our own country, neither in the interests of our producers or consumers.

Greater economy in dress, and especially in the excessive variety of costume, is called for, or our people may have to encounter reverses which may prove disastrous.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, January 25, 1883.

COLOMBIAN TRADE VIA MARACAIBO.

REPORT BY CONSUL PLUMACHER.

In order to call attention to the great importance of Maracaibo, not only as the chief port of Venezuela, but also as the only outlet and inlet for a large part of Colombia, I beg to inclose a statement of the imports and exports of that republic via Maracaibo for the twelve months ending November 30, 1882.

Adjoined I submit a comparison with the traffic of the preceding year. I believe these figures to be reliable, although the data have been exceedingly difficult to obtain owing to the want of regularity in the transit entries at this port.

E. H. PLUMACHER,
Consul.

UNITED STATES CONSULATE,
Maracaibo, January 13, 1883.

Statement of Colombian exports and imports by way of Maracaibo from December 1, 1881, to November 30, 1882, inclusive.

IMPORTS.

Months.	Merchandise.		Salt.	
	Bales.	Kilograms.	Bags.	Kilograms.
1881.				
December	6,776	235,353	1,393	82,134
1882.				
January	3,416	163,161	1,079	64,297
February	3,401	143,172	1,988	117,088
March	2,436	93,327	3,106	183,564
April	3,827	177,874	2,146	127,429
May	881	40,069	3,068	183,295
June	2,102	76,575	5,523	327,902
July	3,330	147,488	2,483	145,115
August	1,248	56,325	1,583	93,153
September	1,943	91,755	1,520	90,477
October	4,783	184,453	2,647	157,476
November	4,061	152,007	2,421	143,089
Total	38,224	1,562,150	28,907	1,714,928

EXPORTS.

Months.	Coffee.		Quina bark.		Straw hats.		Hides.	
	Bags.	Kilos.	Bales.	Kilos.	Bales.	Kilos.	No.	Kilos.
1881.								
December	5,147	298,900	167	9,530	.....	.....	713	8,417
1882.								
January	10,673	585,075	60	3,430	.....	.....	1,616	20,842
February	12,229	712,140	104	6,110	3	125	1,571	19,020
March	19,620	1,151,240	90	4,990	.....	.....	1,783	21,305
April	21,422	1,251,470	213	12,115	3	130	1,273	14,945
May	14,268	831,815	145	8,445	2	105	1,054	12,665
June	15,159	881,015	41	2,330	.....	.....	1,787	21,000
July	13,570	788,195	134	7,965	2	50	835	10,005
August	16,238	943,300	79	4,370	2	80	1,887	22,345
September	17,081	990,010	108	6,230	1	10	1,949	23,095
October	14,937	867,725	121	6,645	.....	.....	1,343	16,085
November	6,535	384,255	29	1,585	5	290	1,724	20,570
Total	166,279	9,685,230	1,291	73,715	18	790	17,535	211,204

RÉSUMÉ.—Imports, 67,131 packages of 3,277,078 kilograms; exports, 185,123 packages of 9,970,939 kilograms.

Comparison.

IMPORTS.

Year ending—	Merchandise.		Salt.	
	Bales.	Kilos.	Bales.	Kilos.
November 30, 1881	61,046	2,065,517	20,073	1,170,047
November 30, 1882	38,224	1,562,150	28,907	1,714,928
Difference	−22,822	−503,367	+8,834	+544,881

EXPORTS.

Year ending—	Coffee.		Quina bark.		Straw hats.		Hides.		Total of kilograms.
	Bags.	Kilos.	Bales.	Kilos.	Bales.	Kilos.	No.	Kilos.	
Nov. 30, 1881 ..	127,530	6,440,265	6,076	346,332	11	480	15,392	184,704	10,207,365
Nov. 30, 1882 ..	166,279	9,685,230	1,291	73,715	18	790	17,535	211,204	12,248,617
Difference...	+ 38,749	+3,244,965	−4,785	−272,617	+ 7	+310	+2,143	+ 26,500	+ 2,040,672

THE IRON TRADE OF SCOTLAND.

REPORT BY CONSUL LEONARD, OF LEITH.

In the Scotch iron trade the amount of business done during the year 1882 has been very great, and in several departments entirely without a parallel in its history. From the end of 1874 to the beginning of 1882 the reaction from the previous inflation was felt severely, and during that period the stock of pig iron in Scotland increased from 96,000 to 940,000 tons. That quantity was the largest ever held, being nearly equal to the ordinary requirements of both the home and foreign markets for a period of twelve months. Although this was discouraging, there was a feeling of confidence in the market, attributable among the causes to an expectation that ere long the restricted production (12½ per cent.) would exhibit its influence in the reduction of stock, and to the belief that the development of trade and of railway and other enterprises in the United States was certain to bring an increase of business to the market of this country. Eventually there was unmistakable evidence that restriction in the output had begun to tell in the direction so much desired, and the foreign exports of pig iron were seen to be increasing.

The stock has been reduced 104,000 tons during 1882, and it amounted to 836,000 tons at the end of December. The turning point, therefore, has now been attained, and throughout the various districts demand appears to have fairly overtaken supply.

Prices have ruled comparatively low, and profits have borne no comparison with what they were a few years ago; nevertheless labor has been cheap, and the cost of fuel and of production generally moderate throughout the whole year.

In January, 1882, the price of Scotch pig iron was $12.91, the highest point for the year, from which it declined until April, when $11.36, the lowest rate, was reached. By this time the improvement in trade had begun to manifest itself, but comparatively little advance occurred in the price, which rose to $12.68 on July 21, and to the end of December fluctuated between that figure and $11.74.

The production by the Scotch iron masters during nine months of the year has been 1,126,000 tons, from an average of 108 furnaces, making about 200 tons per furnace per week. In 1881 the production was 1,176,000 tons, the number of furnaces 116, the weekly output per furnace being 195 tons.

The consumption of pig iron in Scotland exhibits the unprecedented total of 930,000 tons, composed of 585,000 tons Scotch iron, and 345,000 tons English iron, being, as compared with the year 1881, an increase of 188,000 tons in the former, and a decrease of 75,000 tons in the latter.

Shipments in 1882, although less than during some former years, amounted to 645,000 tons, being 67,000 tons above the quantity shipped in 1881, and exhibit a good steady demand from all parts of the world for Scotch iron.

Of these shipments there were 146,518 tons forwarded to the United States, which is an increase of 39,747 tons over the quantity shipped thither in previous year, but less than the amount in 1880 by 87,825 tons.

The production of malleable iron in Scotland during 1882 was 474,000 tons, showing an increase of 113,000 tons over the quantity produced in 1881, and 182,000 tons above the production in 1880.

The exports of malleable iron have not increased proportionately with the great increase in production of that article. During 1882 the quantity exported was 26,805 tons, being 5,755 tons in advance of the total exports in 1881, and 1,896 tons more than the quantity exported in 1880. But in 1873 the exports were 25,830 tons, only 975 tons below those in 1882; they declined to 14,489 tons in 1876, and have steadily risen since then. Of those exports of malleable iron during 1882, there were 3,900 tons shipped to the United States.

Further details of the Scotch iron trade are set forth in the following comparative statement.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, February 2, 1883.

Statement showing the iron trade of Scotland for ten years.

Description.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Production of pig iron in Scotland	998, 000	806, 000	1, 050, 000	1, 103, 000	982, 000	902, 000	932, 000	1, 049, 000	1, 176, 000	1, 126, 000
Shipments to the United States	78, 173	36, 467	44, 107	26, 445	30, 931	15, 691	139, 497	234. 343	106, 771	146, 518
Shipments to other countries	375, 040	278, 974	358, 955	295, 710	264, 159	234, 215	268, 795	286, 022	285, 959	326, 515
Total	453, 213	315, 441	403, 062	322, 155	295, 090	249, 906	408, 292	520, 365	392, 730	473, 033
Shipments, coastwise and per rail, to England, &c.	240, 787	197, 559	212, 938	217, 845	209, 910	184, 094	160, 708	150, 635	185, 270	171, 967
Total shipments	694, 000	513, 000	616, 000	540, 000	505, 000	434, 000	564, 000	671, 000	578, 000	645, 000
Consumption in Scotland of Scotch pig iron	373, 000	317, 000	360, 000	370, 000	335, 000	294, 000	302, 000	384, 000	397, 000	585, 000
Total shipments and consumption	1, 067, 000	830, 000	976, 006	910, 000	840, 000	728, 000	866, 000	1, 055, 000	975, 000	1, 230, 000
In stock, end of December	120, 000	96, 000	170, 000	363, 000	505, 000	679, 000	745, 000	739, 000	940, 000	836, 000
Average number of furnaces in blast	119	96	117	117	103	90	88	106	116	108
Furnaces in blast end of December	152	157	156	157	155	154	154	150	148	148
	Per ton:	*Per ton.*	*Per ton.*	*Per ton.*	*Per ton.*	*Per ton.*	*Per ton.*	*Per ton.*	*Per ton.*	*Per ton.*
Average price for the year	$28 45	$21 29	$16 00	$14 28	$13 22	$11 78	$11 44	$13 26	$11 94	$12 01
Highest price during the year	35 28	26 53	18 74	16 18	14 07	12 78	16 55	17 76	13 08	12 91
Lowest price during the year	24 58	17 40	13 99	13 56	12 55	10 28	9 78	10 81	10 95	11 36
Price end of December	26 28	19 10	15 82	14 11	12 55	10 52	16 80	12 71	12 61	11 92
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Consumption in Scotland (as above)	373, 000	317, 000	360, 000	370, 000	335, 000	294, 000	302, 000	384, 000	397, 000	585, 000
Imports of English pig iron	125, 000	200, 000	220, 000	285, 000	358, 000	325, 000	315, 000	336, 000	420, 000	345, 000
Total consumption in Scotland	498, 000	517, 000	580, 000	655, 000	693, 000	619, 000	617, 000	719, 000	817, 000	930, 000
Scotch malleable iron:										
Production	189, 312	180, 000	196, 000	230, 000	218, 000	195, 000	222, 000	292, 000	361, 000	474, 000
Exportation	25, 890	25, 070	18, 656	14, 489	16, 512	17, 723	20, 414	24, 909	21, 050	26, 805

J. A. LEONARD,
United States Consul.

UNITED STATES CONSULATE,
Leith, February 2, 1883.

AGRICULTURE IN VENEZUELA.

REPORT BY CONSUL BEACH, OF PUERTO CABELLO.

But few countries are more highly favored than Venezuela in having a large area of good soil, and climate conducive to the growth of vegetation. Topographically it embraces mountains, valleys, and plains. Nearly all of its soil bears a luxuriant growth of natural and spontaneous vegetation, and of course is capable of sustaining prolific cultivated crops. Meteorologically the year may properly be divided into two seasons of six months each—the summer season, beginning with May and ending with October, and the winter season, embracing the other six months. The climate is very uniform the year through. During the summer season the mercury, by Fahrenheit, ranges from 75° to 85°, with no severe gales or other storms. The other six months is the same, except that the temperature during the six months winter season averages 5° cooler, it ranging from 70° to 80°. I never knew the mercury to go below 70°, and on but three occasions above 85°, when it went to 87° and 88°. The so-called "rainy season" is a period when showers are quite frequent, but not so frequent as to materially interrupt general business. The annual rainfall averages about the same as in the United States, and is usually so distributed through the year as to promote crop production. The equable temperature makes the whole year a season of "seed time and harvest," the general work of crop production going on the same at all times. Of the several kinds of crops grown, coffee is the only one that has its season, blooming in May and maturing in August and September, yielding but one crop per year. The landscape views, whether embracing mountains, valleys, or plains, are alike at all periods of the year, always bright in verdure; and the natural flowers blossom the same in January as in April, July or October. For the same reason the fruit and vegetable supply is very uniform, fresh-gathered cucumbers, cabbages, new pease, new beans, new potatoes, new tomatoes, fresh oranges, fresh pineapples, fresh bananas, fresh melons, &c., being always alike abundant. The orange trees contain at the same time blossoms, and fruit in all stages of growth from the first setting to that fully matured. The lemons, limes, cocoanuts, and other fruit-bearing trees possess the same characteristic.

There is a class of products requiring but little cultivation of the soil. In this class is included coffee, cacao, oranges, lemons, limes, and cocoanuts. The land is cleared, then the trees are set out, after which the wild vines and weeds that spring up are kept down by the frequent cuttings with long-bladed knives. This appears to be all the cultivation requisite; at least no other is given. The cocoanut trees, after they get a fair start, do not need even the care mentioned, as they are tall and appear to hold their own where the jungle is very dense. Coffee is by far the most valuable crop produced in Venezuela, and may in relative importance be ranked with the wheat crop of our Northern States and the cotton crop of our Southern States. Nearly all of the financial interests of the people are largely contingent on coffee, the amount of the crop and its export value. Cacao is also an article of considerable importance for exportation. White grapes in small quantities are produced in perfection, and no good reason appears why the extensive arabie

mountain ranges might not be utilized for their production, as the maritime Alps in France and Italy are utilized.

The methods of cultivating the land are very crude and antiquated. Modern plows may be in use, but in extended travel I never saw one. The only kind of a plow that I have seen in Venezuela was of domestic manufacture, made by pointing a round stick about six inches in diameter and encasing the point in iron—like those seen in portions of Italy. This iron-pointed stick set in a frame at a suitable angle and drawn by a team turns a furrow each way, very much as a hog would root it. It enlivens the soil, has a tendency to draw out foul stuff, and on the whole is much better than no attempt at plowing. Most of the tilled land is not cultivated by plowing, but by hoeing. After it has been cleared by cutting the jungle and burning over, a crop is planted by hoeing, and the hoeing is continued at intervals until the crop is harvested. Not one acre in a hundred capable of producing a good crop is ever cultivated. Of the cultivated crops corn or maize is the most important. Near the cities it is grown expressly for horse feed, and it is likewise the principal food of all the ox-teams, horses, mules, and donkeys used for the interior transportation of merchandise. When raised for stock-feeding, the grower plants the seed so as to have a constant supply for cutting at full growth, which is marketed green in bundles. The trade in green cornstalks is large and regular, and doubtless profitable. In places remote from the large towns the corn fully matures, and is sold in the grain by the 100 pounds. The corn is of excellent quality, and in quantity ample to supply the home demand. Three crops of corn can be raised per year on the same land.

Sugar-cane is grown by a process of cultivation similar to that of corn. Sugar is produced in quantities sufficient to supply the home demand. As a rule, having rare exceptions, the methods of manufacturing sugar are ancient, and the whole industry would be greatly benefited by putting in use modern machinery. The sugar is sold both in a raw state and imperfectly refined, much the larger part raw. There is also produced from the sugar-cane a species of rum, which is a "strong drink," and which is largely used by the native population. All the products of the sugar-cane might be increased a hundred fold.

Nine or ten varieties of beans are grown, and usually in great perfection, but only in quantity sufficient for domestic use. Like corn, three crops could readily be grown on the same land per year, and the total supply might be made very great. Pease, likewise, are a prolific crop, but are grown only in quantity to supply home consumption. They are an important article of food, and, together with beans, are extensively used in making soups.

Live stock of nearly all kinds is successfully raised in this country. The cattle are large, and usually excellent, the working oxen being especially strong and serviceable. There are some good horses, but as a rule they are of medium size and inferior appearance; and hardy mules are raised numerously, which in size and for work will compare favorably with those bred in the United States. Donkeys are raised in large numbers, and made useful for many purposes. Goats, to some extent, are raised everywhere; but in some of the mountainous sections they are kept in large flocks, often a thousand or more, and made profitable through the sale of their skins and flesh, the latter in the form of jerked meat after being dried. Hogs are raised in small numbers quite generally, which are consumed as fresh meat; hams, lard, and salt pork being imported, chiefly from the United States. Poultry is raised universally, is the best meat food in market, and usually is not very dear. But-

ter and cheese are made in the interior, but seldom of good quality. Nearly all consumed in the cities is imported. Cotton is a native plant. It has been grown to a moderate extent, and there being no home manufactories it is shipped to Europe. A small quantity of indigo is produced and shipped abroad.

The farm fences are mostly of the hedge order, generally formed of native shrubs or plants, the cactus often being brought into requisition. The barbed-wire fences have recently been introduced, and there is an increasing demand for them, they being more economic than hedges.

Wheat, rye, oats, barley, and buckwheat are not grown, and hay only very restrictedly.

HORATIO N. BEACH,
Consul.

UNITED STATES CONSULATE,
Puerto Cabello, February 8, 1883.

CROPS IN IRELAND.

REPORT BY CONSUL PIATT, OF CORK.

The inclosed paragraph, which I find in a local journal (the Cork Constitution), presents some studies of the crops in Ireland for the year 1882, derived from the official report of the registrar-general, recently issued. It will be seen that the harvest for the year just ended was not so good as was generally believed at the time my annual report, dispatch No. 21, was written. The potato crop especially suffered from the continued wet weather of the later autumn months. As a consequence there has been and is much distress in some parts of the island, particularly the western portion. It will be observed that of $28,314,109.70, the depreciation in money value of the total crops of 1882 as compared with the unusually favorable year 1881, the potato is responsible for $21,012,023.78; while of $12,300,876.85 depreciation in money value of the crops last year as compared with the average of the last ten years the potato is answerable for $11,068,518.46, representing a decrease of 758,143 tons. The harvest of 1882 was, however, by no means a failure. The money value of crops was $13,147,618.65 over that of 1872, and $28,166,026.97 over that of the disastrous year 1879, the last so-called famine year. The general result seems to have been that the harvest in Ireland for the year 1882 was slightly below the average.

JOHN J. PIATT,
Consul.

UNITED STATES CONSULATE,
Cork (Queenstown), January 19, 1883.

[Inclosure in Consul Piatt's report.]

According to the registrar-general's report to the lord lieutenant, a copy of which lies before us, the harvest of 1882 has proved an unfavorable one. It was not, however, nearly so bad as that of 1879, nor has it been as backward as that of 1872, which, next to 1879, was the most unfortunate harvest during the past twenty years. The general result of the harvest approaches more nearly that for 1877 than any year in comparatively recent times. It is in contrast with the results of the exceptionally prosperous years 1880 and 1881, that the harvest of last year seems so unfavorable. The produce in 1882, compared with the average of the ten years from 1872 to 1881,

shows in cereal crops a decrease in wheat of 153,500 cwts.; in oats, 1,108,453 cwts.; in barley, of 892,212 cwts.; of bere, of 5,729 cwts.; and of rye, of 19,697 cwts. The yield of other crops was also below the general average. In potatoes there was a decrease of 758,143 tons; in turnips, of 717,949 tons; in mangel-wurzel and beet-root of 147,631 tons. Hay alone showed an increase, which tots up to 294,349 tons. The depreciation in money value of the crops last year is set down at £5,818,167 as compared with 1881, and to £2,527,664 as contrasted with the average of the preceding ten years. The value of the harvest in 1882 is represented as £2,701,658 over the year 1872, and as £5,787,738 over that of the disastrous year of 1879. It will not surprise our agricultural friends to learn that, as in the year last named, the great bulk of the money loss was on the potato crop, in which the diminution of value is £4,317,687 as compared with 1881, and £2,274,431 as contrasted with the average value of the yield for the last ten years.

LIVE STOCK OF DENMARK.

REPORT BY CONSUL RYDER, OF COPENHAGEN.

I have herewith the honor to transmit a report on the census of live stock taken in this country in the latter part of 1881. From the returns now published the numbers of the various classes of animals in the country are given as follows:

Animals.	In the islands.	In Jutland.	Total.
	Head.	*Head.*	*Head.*
Horses	180,326	167,235	347,561
Asses	229	53	282
Horned cattle	586,497	883,581	1,470,078
Sheep	459,548	1,089,065	1,548,613
Goats	4,609	4,722	9,331
Pigs	285,317	242,100	527,417

The first live-stock census taken in this country was made in the year 1838, the next in 1861, and thereafter every fifth year, viz, 1866, '71, '76, and 1881. Reviewing the changes which have taken place in the various classes of animals, it appears that there is a small falling off in horses since 1876, the loss occurring mainly in the islands; but this decline may be accounted for in some measure from the great increase in the census of 1876, as compared with that of 1871, owing to the special pains which had been taken throughout the country to increase this stock, which had been previously so much reduced by exports in order to supply the demands made for the Franco-German war. Of horned cattle, a considerable increase has taken place since 1876, namely, of about 120,000 head, the increase being largest in Jutland. Sheep, on the other hand, since that period are found to have been reduced by 170,000, the loss falling mainly in the islands; and, finally, pigs have shown an increase since 1876, especially in the islands.

Dividing the time from 1838 (when the first census was taken) until that of last year, into three periods, so that the first should embrace the years 1838–'61, the second those of 1861–'71, and the last, 1871 to 1881, the collective amount of live stock has been on the increase in all three periods; but the increase, which was about the same in the two first periods, in the last was about once and a half greater than in the two previous ones.

In respect to horses, there was an increase in the first period in Jutland, with slight decline in the islands; in the second period a reduc-

tion throughout the country, and for the third period an increase both in Jutland and the islands. Horned cattle show an absolute increase during all of the three periods. Sheep, in the first period, an increase both in Jutland and the islands; in the second period, increase in Jutland, and in the last period, a decline both in Jutland and the islands. Pigs, a large increase during all of the three periods, especially in Jutland. In reviewing the different census tables, it appears that whilst horses in the collective three periods, from 1838 to 1881, have only increased by 7 per cent., horned cattle increased 72 per cent., and pigs even as much as 125 per cent., whilst for sheep, during the same time, a decline of 6 per cent. is to be noticed.

The large increase in the number of pigs is of interest, inasmuch as it tends to demonstrate the great progress which has been made throughout the country during the same lapse of time. It is also satisfactory to observe the great increase which has taken place in horned cattle, as being a sign of the great advance in the material wealth and well-being of the country during these periods.

The small increase which has taken place in horses is not a matter of such national importance. This class of live stock, being in great measure the representative of labor, the requirements for such animals may have been displaced by other and cheaper descriptions of motive power, and consequently a decline in stationary position in their number can scarcely be looked upon as a national loss; and the cause of decline in the number of sheep may doubtless be found in the higher state of cultivation of the land which has taken place since 1838; as in Belgium, for example, where a high state of culture exists, sheep have in many places almost entirely disappeared.

In making a comparison between the different divisions of the kingdom, I shall first take the number of the animals in proportion to the amount of population, and next according to the extent of area.

Thus, comparing Jutland with the islands (Copenhagen being excluded), it appears that in the islands 200 horses are to be found per 1,000 inhabitants, against 100 horses per 1,000 inhabitants in Jutland; and in taking the area it appears that Jutland has only half as many horses per square mile as the islands.

Of horned cattle, Jutland has about 1,000 head per 1,000 inhabitants, whilst in the islands there are not more than 600 to 700 head. If we compare with the area the difference will be less; in the islands there being 2,400 to 2,500 head per square mile, against 1,900 to 2,000 head in Jutland.

Of sheep, Jutland has the largest number, both as compared to population and area. There are in Jutland 2,300 to 2,400 sheep per square mile, and in the islands only 1,900 to 2,000. According to population Jutland has two and a half times as many as the islands.

Of pigs, there are many more to be found in the islands.

Taking now the entire collective amount of animals, Jutland will be seen to have the largest number per 1,000 inhabitants, but taking area the island districts will be found in advance. This result is natural, when we bear in mind that the islands are mainly grain producing, whilst Jutland is cattle producing.

Of male animals, more are proportionally to be found in the islands. The difference is not great as regards sheep and pigs, but more so with regard to stallions, and especially bulls, of which there are to be found nearly three times as many in the islands as in Jutland. Regarding the different breeds, the greater proportion of the stallions belong to the home race; and the same with bulls and rams. Of full-blood stal-

lions there are 50 in the islands, 216 in Jutland; and of half-blood, 245 in the whole country.

Of foreign bull breeds the most numerous are those of the Angle race (3,323), chiefly to be found in the islands; next come English short horns (990), chiefly in Jutland. The short-horns have increased from 211 head in 1871 to 990 in 1881, and the Angle bulls from 2,200 in 1871 to 3,323 in 1881; other breeds are of minor importance. Of rams, the largest number are to be found in the islands. The foreign breeds are Dishley (8,459), Southdown (2,471), and Merinos (344).

With regard to the numbers of which the herds of horned cattle are composed, the census returns of 1881 give them in three classes, divided as follows, viz: 1,872 herds of 50 head and above; 26,761 herds of 15 head to 49; 70,000 herds of 2 to 5. The increase to be observed in this stock has chiefly taken place amongst the larger herds of the first class; whilst in the herds of the other two classes the increase has not been of much extent.

In comparing finally the census with those of the other European countries it will be seen when taking population and area of territory into account that Denmark occupies a very high position in regard to live stock, being only surpassed by few, such as Ireland, Belgium, Holland, and Wurtemberg. The relative positions between the most favored of these named, Ireland, may be given as only between 100 for the former to 85 for the latter; whilst a comparison with the less favored ones will show that Denmark has four times as many animals as Italy and fifteen times as many as in the least favored country (Finland).

HENRY B. RYDER,
Consul.

UNITES STATES CONSULATE,
Copenhagen, December 21, 1882.

ITALIAN RAILROADS.

REPORT BY CONSUL DUNCAN, OF NAPLES.

The director-general of the Italian railroads has recently published some statistics of Italian roads which may have a general interest for those interested in railroads in the United States. I will therefore give a brief résumé of the principal points of this report.

As is well known, the Italian railway system was late in development in comparison with that of her principal neighbors, and this for very manifest reasons. Her unity as a nation is of but short duration, and the exertions and expense of attaining it left her finances in a deplorable condition, from which they have not yet fully recovered. All her available resources were required for military purposes; and public education, internal improvements, developments of commerce, &c., have been to a considerable extent necessarily neglected.

Roads complete to 1881.—Up to January 1, 1881, there were only 8,715 kilometers (5,412 miles) of completed railroad in all Italy. Of these, nearly half were in North Italy, on a territory containing about 8,000,000 inhabitants, while the remainder were scattered over Central and Southern Italy, over a much larger territory, containing 20,000,000 inhabitants. It appears from this how inadequately, especially this latter portion of Italy, was supplied with means of communication.

New roads projected.—After long discussion, and many changes and

additions, to satisfy the different local interests, in 1880 a sort of omnibus railroad bill passed Parliament, providing for the building of about 6,000 kilometers more railroad in different parts of the kingdom. A large proportion of these were located in Central and Southern Italy and Sicily, and when they are all finished the Italian network of railroads will be pretty complete. In this network are not included either the projected roads on the island of Sardinia, or a more direct line between Naples and Rome.

This latter it is intended to build along the coast, via Gaeta and Terracina, with urgency, thus shortening the distance nearly one-third, and the time nearly one-half between these two principal cities. But when all these contemplated roads are complete, there will still be less than 16,000 kilometers of railroad in Italy for a population of 29,000,000, and an area of over 296,000 square kilometers—a smaller proportion than any other country of Central or Western Europe, except Spain and Portugal.

Expense of building.—Railroad building in Italy is exceedingly costly as compared with what it is in some other countries, our own, for instance. The average cost of construction of the Italian railroads is a little over 300,000 lire per kilometer, or about $112,000 per mile, while according to Poor's Railroad Manual for 1882 the 10,000 miles of railroad constructed in the United States during 1881 cost $250,000,000, or only $25,000 per mile. The estimated cost of some of the projected roads amounts to nearly 500,000 lire per kilometer, and the longest line of all, 521 kilometers, between Eboli and Reggio, opposite Messina, will cost to construct 211,000,000 lire, or over 400,000 lire per kilometer. This greater cost is of course explained in part by the difficult, mountainous character of a large portion of the country, in part by the greater solidity of the roads built, and no doubt in great part because they are built at public expense instead of by private enterprise.

Capital, how obtained.—The capital for building Italian roads is obtained by a Government guarantee of bonds at 5 to 6 per cent., so that as the net average profit of these roads amounts to only about 2 per cent., the remainder, 3 to 4 per cent., has to be paid out of the public treasury. From this it will appear how impossible it would be to get capital to construct the railroads by private enterprise. The cost of the Italian roads completed January 1, 1881, amounted to 2,616,737,794 lire, or about $520,000,000. The total gross income for 1880 was 180,106,818 lire, or about $36,000,000, while the running expenses amounted to 122,262,862 lire, or nearly 5 per cent. on cost of construction, leaving only 57,000,000 lire, or about 2 per cent., as the net income. From a statement before me it appears that the average net income of American roads is slightly over 4 per cent. and of English about 4½ per cent.

Passengers.—During the year 1880 the Italian roads transported 32,491,827 travelers, as follows:

First class	1,154,958
Second class	5,594,445
Third class	14,941,808
Soldiers for account of Government	10,800,606
Total	32,491,827

Accidents.—During same year trains ran off the track on the Italian road 490 times. There were 347 collisions, 179 persons killed by accident, 688 wounded, and 54 suicides.

By far the most important of the new roads is the one just completed between Novara and the north end of Lake Maggiore, by which the

port of Genoa is brought in more direct connection with the Saint Gothard road and Switzerland and Germany.

B. O. DUNCAN,
Consul.

UNITED STATES CONSULATE,
Naples, December 12, 1882.

GRAPE CULURE AND WINE MAKING IN RUSSIA.

REPORT BY CONSUL-GENERAL STANTON, OF ST. PETERSBURG.

Along the shores of the Black Sea, Sea of Azof, and on both sides of the Caucasian Mountains, Russia possesses a vast territory devoted to the culture of the grape. Astrachan may be considered as the home of Russian grape culture, since the first vines were planted there at the beginning of the seventeenth century. During the latter half of the same century Russian vintners were sent to the river Terek, and laid the foundation of the present grape culture in that district.

In Transcaucasia the culture of the vine dates back to immemorial times, and the opinion prevails that the diffusion of the grapevine over Europe proceeded from this country.

In the Taurida peninsula and modern Bessarabia the grape culture owes its origin to the Grecian colonies, founded there some six centuries before the Christian era. Old Grecian amphora, which have been found on the banks of the Don, justify the inference that the Greeks extended the culture of the grape to these districts also.

In the Crimea, grape culture attained its prime between the eleventh and fifteenth centuries, under the dominion of the Genoese. Under the Tartars, however, it fell into decay, similar to that of the Caucasian districts under the rule of the Turks and Persians. With the accession of the Russians the grape culture began to flourish again, and was extended by them to the Kuban and Terek districts.

In the following short review of the grape culture in the various districts of Russia, the data given (with the exception of Bessarabia and the Don districts) refer to the period of 1870 and 1874.

GRAPE CULTURE IN EUROPEAN RUSSIA.

1. In Bessarabia the culture of the vine extends over the whole Government and into the bordering districts of the Governments of Kerson and Podolia. In 1870 the yield was 965,250 gallons of wine, and, according to official data in 1879 Bessarabia alone produced 18,756,000 gallons. The wines are generally light, the red varieties resembling the French, the white the Rhine wines. The wines produced in Bessarabia from French and Rhenish vines are known in trade as Bordeaux, Burgundy, Rhinewine, Sauterne, &c.; the label indicating also the district in which the wine was grown. The best known are the Ackermann, the Odessa, and those of the Bulgarian colony. The majority of the grape-growers sell young and unfermented wines to dealers, and in the whole district but six wine-growers made and sold a finished wine under their own names.

2. In the Crimea, grapes are cultivated throughout the whole Taurida peninsula, but only four districts are of importance, viz, Yalta, Eupatoria, Simferopol, and Feodosia.

Compared with the rest of Russia, grape culture has attained its greatest perfection in the Crimea. The newest methods are adopted, and relatively a large number of vine-growers, particularly those on the

southern shores, make and sell their own wine under their own names in St. Petersburg and Moscow.

The Government has paid the greatest attention to grape culture in the Crimea. In 1812 the Imperial Nikita garden was laid out on the southern shores in the vicinity of Yalta; and in 1828 the Margaralsch school of vine culture was established. In 1868 the above-mentioned garden was transformed into the Nikita vintage and gardening school, but Margaratsch school remained unaltered, in order that the students of the Nikita institute might learn grape culture practically.

In 1870, 3,037,500 gallons of grape juice was pressed in the Crimea. The yield of this district has steadily increased since the beginning of the present century, viz, in 1823, 466,154 gallons; 1849, 2,119,000 gallons; 1833, 650,000 gallons; 1870, 3,037,500 gallons. In the district of Yalta the yield has increased as follows, from 1861 to 1871, viz:

	Gallons.
1861–1863, annual average	298,854
1864–1866, annual average	382,846
1867–1869, annual average	506,557
1870–1872, annual average	1,130,676

The Crimean vintners pass the grapes through a kind of grater, in order to separate them from the stems, the juice flowing into double-bottomed vats, the upper one being perforated, and the berries are then put in the press. Ordinarily the wine-presses are of wood and of the simplest construction. The must is filled into casks, in which it remains 24 hours, when it is poured into other casks, where it remains fermenting from 10 to 12 days, being kept at a temperature of from 16° to 22° Celsius. When fermentation ceases the partially empty casks are refilled. The first transfusion takes place in December, the second and third in March and September. For clarifying, gelatine and isinglass are used, and at times, for red wines, albumen also. The majority of the vine-growers sell their wine to wine dealers in unfermented and unripe condition, by whom it is perfected and put upon the market. In the main the Crimean wines are known by the name of the estate in whose cellars they have ripened, sometimes by the name of the grape they are pressed from. They are consumed throughout Russia and also abroad. In 1872 and 1873 the Yalta district exported 364,443 gallons and 212,904 pounds of wine.

3. The Don wine district lies in the Government of the Cossacks, and owes its existence to Peter the Great. Up to 1820 the annual yield was not more than 65,000 gallons, while in 1870 it was not less than 4,875,000 gallons. The grape-growers seldom make any wine themselves, but sell their crops to wine-makers called "Vinniki." Fresh and dried grapes are used for wine-making, and that made from the latter is the best and strongest. The wine is seldom ripened and clarified by the "Vinniki," but transferred by them to wine-dealers for this purpose. Generally the Don wines are light, watery, and keep badly. A certain quantity is employed in the manufacture of "Don champagne." Those vine-growers who make wine for their own consumption pay the greatest attention to its manufacture, and produce an article which will compare favorably with many a European wine. These wines are not in the market, however, but only the very inferior article produced by the Vinniki.

4. The Astrachan wine district embraces the lower reaches of the Volga lying in this district. The wine production is unimportant, since the grapes, which enjoy a good reputation, are sold as fruit. In 1870 not more than 48,750 gallons were produced, and, according to official data in 1880, one firm made $15,000 worth of wine.

CAUCASIAN DISTRICTS.

The culture of the grape is carried on north of the Caucasian Mountain chain in four districts, viz, the Kuban, the Kumaschia, the Terek, and the Daghestanian. The Terek-Kumyksian district produces the greatest quantity, viz, in 1870, 4,875,000 gallons; in 1874, 9,750,000 gallons. These wines are quite celebrated among Caucasian wines, about 1,625,000 gallons being sold annually at the Nischni-Novgorod fair. Grape-pressing in this district is done in vats and troughs, with the hands and feet. The must ferments in casks, in which it remains until autumn, when it is clarified and put on the market. The Kuma district ranks second, and produces annually from 812,000 to 975,000 gallons. The wine of this region is sold after the first fermentation, is light and watery, and consumed chiefly in the Novgorod and Black Sea districts. In Daghestan about 487,500 gallons of a wine is produced which is chiefly consumed by Caucasian Musselmen. In the Kuban district grape culture is of recent date, and the wine produced is consumed on the spot. In 1870 the production was about 18,200 gallons; in 1873, 33,508 gallons.

In Transcaucasia not less than 32,500,000 gallons of wine are annually produced. The province may be divided into five districts, viz:

1. The Rion-Black Sea district, which yielded in 1870 16,725,000 gallons;
2. Kachetian, yielding 9,725,000 gallons;
3. The Kura district, with an annual production of 4,872,500 gallons;
4. The Arax district, yielding 3,250,000 gallons; and the
5. Shemahka district, producing 325,000 gallons.

The Circassian wines are for the most part consumed in that province, but latterly the better varieties are finding a market in the leading cities of Russia. The best wines are found in the Kachetian and Black Sea districts, where red wines especially are of good quality. The Government of Erivan produces the strongest wines. Only about one-third of the annual production finds its way into the markets, the larger portion being reserved for private consumption.

In Kachetia the vintners erect a peculiar style of barn called "maralyen," in which are placed wooden or stone presses, whose floors slope to an opening for the issue of the wine. Above the press is a beam, to which the laborers cling whilst treading out the grape juice with their feet. Earthen jars serve as receptacles. The must first issuing is separated from that resulting from an increased pressure. The former yields a poor and weak, the latter a better and stronger wine. The fermentation takes place in jars. White wines ferment from eight to ten, red wines from three to seven, days, when they are transferred to new jars. The lees are used for the distillation of brandy. The wine remains in lightly closed jars, which are buried in the ground until December, when they are hermetically closed and covered with about two feet of earth. This method of wine-making prevails, with slight alterations, throughout the Caucasian wine districts. In Transcaucasia the wine is transported in goat-skin bags, and generally sold in them. The casks are smeared with fat or kerosene, which gives the wine a disagreeable taste. The vine is also cultivated in Turkestan, and to some extent brandy and wines are made.

RUSSIAN VS. FOREIGN WINES.

The great drawback to Russian wines is the faulty manner of preparing them, which leaves much to be desired, especially as regards their keeping qualities. There is, moreover, a great deal of mixing and adulteration practiced in the districts where the wine is grown. Wines

of various vintages are constantly mixed, causing a great variation in the quality of the wines. Dealers are also in the habit of adding various ingredients to the unripe wine for the purpose of counterfeiting the better known varieties of foreign wines. Latterly, in consequence of the depredations of the phylloxera in France, foreigners have appeared in certain districts who buy up the new wine and export it abroad, whence it returns labeled as French wine. The habit prevailing in so many lands of giving the foreign product the preference over the home-made article is a serious obstacle to the development of the Russian wine trade. The majority of Russian consumers prefer the imitations sold as Madeira, Sherry, Bordeaux, &c., to the natural Crimean wines.

The Crimean, the Kachetian, the Bessarabian, Don, and Astrachan wines are better than the others. All have not been carefully analyzed, but in 1864 and 1870 many of the better varieties were analyzed in Moscow and Odessa. The dessert wines have the greatest specific weight, the table wines (vins ordinaires) the least. All carefully-prepared and well-fermented Russian wines are as a rule stronger than foreign wines made from the same variety of grapes.

The Russian wines, classified according to their acidity, rank as follows, viz: The Bessarabian red wines are the sourest; then come the Caucasian and Crimean red wines, the Caucasian and Bessarabian white wines, and the Crimean dessert wines. Altogether the Russian red wines, as regards acidity, resemble most the French red wines; the white wines are less sour than the German wines. The Russian red wines contain more tannin than the French ones, while the white wines have little or none.

TOTAL WINE PRODUCT.

The grape-growing districts of Russia and Caucasia yield annually not less than 48,750,000 gallons of grape juice, nearly 16,125,000 gallons of which are consumed on the spot, the remainder coming into the general market. The following table shows the relation of that consumed by the vintners to that consumed by the public:

District.	Amount of grape juice pressed in 1870.	Amount reserved by wine-growers for own use.	Amount put on the market.	Total production by wine-growers.	Total consumed by public.
	Gallons.	*Gallons.*	*Gallons.*	*Per cent.*	*Per cent.*
Transcaucasia:					
Rion—Black Sea	10, 570, 625	7, 399, 457	3, 171, 187	70	30
Kachetia	9, 474, 010	2, 368, 502	7, 105, 508	25	75
Kura	4, 684, 207	2, 845, 525	1, 853, 683	60	40
Araxes	3, 117, 400	1, 870, 440	1, 246, 960	60	40
Schemakha	311, 145	77, 786	233, 360	25	75
Total	28, 107, 387	14, 561, 690	13, 610, 698	52	48
Caucasia:					
Tereken-Kumryk	5, 362, 500	1, 340, 625	4, 021, 875	25	75
Kooma	1, 356, 485	339, 121	1, 017, 363	25	75
Daghestan	455, 000	227, 500	227, 500	50	50
Kuban	18, 200	4, 550	13, 650	25	75
Total	7, 192, 185	1, 911, 796	5, 280, 388	26	74
European Russia:					
Bessarabia	9, 611, 641	1, 541, 646	8, 169, 895	15	85
Crimea	3, 035, 571	212, 491	2, 823, 080	7	93
Don	487, 500	97, 500	390, 000	20	80
Astrachan	4, 875	975	3, 900	20	80
Total	13, 139, 587	1, 752, 712	11, 386, 875	13	87
Grand total	48, 439, 159	18, 226, 198	30, 277, 961	37. 5	62. 5

WINE IMPORT AND EXPORT.

It was stated above that of the 48,750,000 gallons annually produced in Russia, about 32,500,000 gallons were sold. Of this latter amount at least one-half is consumed in the producing districts, the remainder in other parts of Russia, and only about 0.02 per cent. is exported. The following table shows Russia's wine export and import from 1853 to 1880. The values are given in rubles on account of the difficulty of ascertaining the correct equivalent in United States money:

Years.	Average annual export.	Average annual import.
	Rubles.	*Rubles.*
1853–1855	11,120	5,568,485
1856–1860	39,200	6,322,905
1861–1865	72,425	6,969,92[illegible]
1866–1870	30,600	7,586,6[illegible]
1871–1875	24,600	12,802,8[illegible]
1876–1880	99,950	12,085,6[illegible]

Twenty-five per cent. of the imports of the last five years, or about 3,000,000 rubles, are for sparkling wines. This table shows that the value of the imported wines is 100 fold greater than that of the exported Russian wines, and that the export of wine from Russia is unimportant both in proportion to the home production and the foreign import. The export steadily increased during the first twenty-eight years, when it fell off, but increased once more during the last quintennium. The decrease in the import during the last five years is due to the decreased import of the years 1877 and 1878, in which the amounts were, respectively, 3,237,000 rubles and 9,164,000 rubles, whilst at the beginning and end of the quintennium the import was over 17,000,000 rubles.

The import trade is confined chiefly to the Baltic ports, St. Petersburg, and Riga, and the western land frontier, whilst the export is almost exclusively restricted to the southern ports, Odessa and Batoum.

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, February 13, 1883.

COMMERCE AND INDUSTRIES OF NOVA SCOTIA.

REPORT BY CONSUL HOBART, OF WINDSOR.

The past year has been one of increased prosperity in every branch of business in this province. Manufactories, mining, lumbering, and other industries, have increased and become more remunerative, while agriculture has yielded much more largely than in former years. The election in June fully indorsed the principles of the protective tariff, and gave the Government which inaugurated that policy a very large ma-

jority, fully sustaining it. Under this policy manufactories have sprung up throughout Nova Scotia, employing a large amount of capital and labor hitherto unemployed.

The gypsum trade has largely increased, and a great quantity has been shipped to the United States, to which country it is almost exclusively exported. Especially has the demand for white gypsum increased, having nearly doubled in amount since last year, owing to active building operations in the United States, where this variety is calcined and used for finishing. Blue gypsum has been in steady demand for fertilizing purposes. It is used in phosphates, and many other ways as a fertilizer. The tariff of the United States prevents manufacturing of gypsum to any extent in the Dominion, as the duty of 20 per cent. added to the cost of manufacturing would bring the price above the market value of manufactured gypsum in the United States. Freights on gypsum averaged about $1.90 per ton for the season. The quantity shipped to the various ports in the United States was about 120,000 tons.

Crops.—The hay crop is very large and of the finest quality, averaging in price from $8 to $10 per ton pressed, ready for shipment.

The yield in potatoes has been abundant; quality good. Sales have been made as low as 30 cents per bushel, but have of late advanced to 50 cents for the best quality. The principal market is in the United States, where there seems to be a steady demand.

The district of Cornwallis, one of the finest agricultural sections in Nova Scotia, and one of the best potato-raising districts in the Dominion, produces the largest quantity.

The United States consular agent for Cornwallis reports a shipment for the year of 317,031 bushels to the United States alone, beside large quantities to other foreign countries.

Apples are plentiful, a great many having been exported from this district. Large quantities are shipped by steamer from Annapolis direct to England, which are said to be most desirable for a foreign market, being less liable to perish from rot than fruit raised in more southern climates. The price of choice winter apples is about $3 per barrel. Other products of the soil are generally abundant and of good quality.

Mining.—There is still an active demand for coal for home consumption and exportation, and prices are higher. The company working the Spring Hill mines find no difficulty in disposing of the quantity mined. They are shipping both at Parrsboro, N. S., and Dorchester, N. B., and with increased facilities will be able to supply the larger demands which they anticipate. The production of manganese is steadily increasing each year, and will be likely to still further increase, as new mines are being discovered. The whole of this ore thus far produced has been shipped to the United States, where there seems to be an unlimited demand at a very remunerative price; the best quality being worth at the place of shipment about $1.40 per ton.

Shipbuilding is on the increase. Quite a number of vessels of different classes have been finished and launched within the last year, and there are a number of the largest size still on the stocks.

Preparations are being made to build on a larger scale next year. Vessels now being built, as heretofore, are largely of spruce, the finish and models being much improved. Considerable quantities of hard pine and oak are being used where strength and durability are required in the vessel.

The cost of construction is somewhat higher, owing to the better finish and more costly material. First-class vessels cost about $40 per

ton ready for sea, $30 hull and spars, government measurement. Ships recently built have received a class of from eleven to thirteen years.

Lumber.—Higher prices for lumber have been realized, deals having been sold from $9 to $11 per M for the season. Common pine shipping lumber, worth about $15; laths, $1 per M. Preparations are being made for more extended operations.

Cotton Mill.—The cotton factory, in process of erection when my last report was made, has been completed, and is now in operation, employing in the neighborhood of 100 workmen.

Tannery.—A company has been formed with a capital of $25,000 for the purpose of erecting a tannery in this town.

Two steamers for freight and passengers have been placed on Minas Basin within the year, one running between Windsor and Saint John, the other on the route between Parrsboro and Windsor. The fine steamer New Brunswick, of the International Line, has been placed on the route between Yarmouth, N. S., and Portland and Boston, making two trips each week, and has been well patronized.

TRADE WITH THE UNITED STATES.

The two steamers running between Annapolis, N. S., and Boston, have had a large and continually increasing business, and the line seems to be firmly established. Owing to the moderate fare charged this is the popular route for the great number of people of this province who seek employment in the United States. As this is the most direct route between the United States and the Annapolis Valley, immense quantities of freight have been shipped by it. These and still further improvements which will doubtless be made are warranted by the demands of the business public; and to accommodate the large and increasing summer travel to the various points of interest in the maritime provinces. The rate of exchange between this port and New York is about one-eighth above par, an advance of one-fourth since last year. American currency is now selling for one-fourth, and seems quite popular as a circulating medium here.

Notwithstanding the tariff between the United States and the Dominion, trade seems to be on the increase between this province and the United States, most of the surplus crops finding a ready sale and more remunerative price there than elsewhere. Notwithstanding the duty of 50 cents per barrel on American flour, consumers have found it to their interest to make large importations from the United States.

D. K. HOBART,
Consul.

UNITED STATES CONSULATE,
Windsor, Nova Scotia, December 30, 1882.

TRADE AND NAVIGATION OF CANADA.

REPORT BY COMMERCIAL AGENT ROBBINS, OF OTTAWA.

I.—TRADE.

The trade of the Dominion of Canada, as shown by official reports for the fiscal year ending June 30, 1882, and compared with 1881, was as follows:

Aggregate trade of Canada with all countries, on the basis of total imports and exports.

Description.	1882.	1881.
Total imports	$119, 419, 500	$105, 330, 840
Total exports	102, 137, 203	98, 290, 823
Total aggregate	221, 556, 703	203, 621, 663
Increase of trade in 1882		17, 935, 040
Increase of imports in 1882		14, 088, 660
Increase of exports in 1882		3, 846, 380

Aggregate trade of Canada with all countries, on the basis of goods entered for consumption.

Description.	1882.	1881.
Total imports	$112, 648, 927	$91, 611, 604
Total exports	102, 137, 203	98, 290, 823
Total aggregate	214, 786, 130	189, 902, 427
Total increase in 1882		24, 883, 703
Increase of goods entered for consumption in 1882		21, 037, 323

DUTIES COLLECTED BY CANADA.

The duties collected by Canada from all countries for the fiscal year 1882, and compared with 1881, are as follows:

Duties, 1882	$21, 708, 837 43
Duties, 1881	18, 500, 785 97
Increase in 1882	3, 208, 051 46

Statement showing the aggregate trade of Canada with all countries on the basis of goods entered for consumption for the fiscal year 1882 and compared with 1881.

Countries.	1882.	1881.	1882.	
			Increase.	Decrease.
United States	$96, 229, 763	$73, 570, 337	$22, 659, 426	
Great Britain	95, 871, 802	97, 335, 378		$1, 463, 576
France	2, 922, 931	2, 294, 043	628, 888	
Germany	1, 633, 118	1, 019, 198	613, 920	
Spain	570, 301	146, 337	123, 964	
Portugal	201, 656	165, 487	36, 159	
Italy	256, 841	234, 723	22, 118	
Holland	613, 241	440, 944	172, 297	
Belgium	645, 568	671, 267		25, 649
Newfoundland	2, 468, 432	2, 175, 773	292, 659	
British West Indies	3, 537, 686	3, 676, 508		138, 822
Spanish West Indies	3, 214, 441	3, 067, 425	147, 016	
French West Indies	181, 114	129, 360	51, 754	
Other West India Islands	85, 715	89, 223		3, 508
South America	2, 314, 779	1, 369, 731	945, 048	
China and Japan	1, 635, 717	1, 430, 734	204, 983	
Switzerland	268, 093	141, 789	126, 304	
Australia	342, 765	146, 506	196, 259	
South Africa	300, 231	220, 459	79, 772	
All other countries	1, 491, 966	1, 277, 205	214, 731	
Total	214, 786, 130	189, 902, 427		

Exhibits showing the value of goods entered for consumption in Canada and exports to all countries for the fiscal year 1882, *also the increase and decrease as compared with* 1881.

IMPORTS.

Countries.	1882.	Increase, 1882.	Decrease 1882.
United States	$48, 289, 052	$11, 584, 940	
Great Britain	50, 597, 341	7, 013, 533	
France	2, 097, 358	466, 026	
Germany	1, 480, 004	545, 738	
Spain	462, 219	62, 535	
Portugal	51, 912		[illegible]
Italy	93, 086	4, 360	
Holland	248, 043	22, 853	
Belgium	503, 210	90, 376	
Newfoundland	493, 509		158, 70[illegible]
British West Indies	1, 848, 724		39, 97[illegible]
Spanish West Indies	2, 196, 168	236, 355	
French West Indies	25, 895	7, 710	
Other West India Islands	12, 597	4, 143	
South America	1, 373, 617	735, 997	
China and Japan	1, 529, 042	118, 069	
Switzerland	268, 093	126, 304	
Australia	2, 157	2, 014	
South Africa	2[illegible] 4, 867	66, 952	
All other countries	932, 033	154, 065	
Total	112, 648, 927		

EXPORTS.

United States	$47, 940, 711	$11, 074, 486	
Great Britain	45, 274, 461		$8, 477, 109
France	825, 573	162, 862	
Germany	153, 114	68, 182	
Spain	108, 082	61, 429	
Portugal	149, 744	41, 150	
Italy	163, 755	17, 758	
Holland	305, 198	149, 444	
Belgium	142, 358		116, 075
Newfoundland	1, 974, 923	451, 454	
British West Indies	1, 688, 962		98, 851
Spanish West Indies	1, 078, 273		80, 339
French West Indies	155, 219	44, 044	
Other West India Islands	73, 118		7, 651
South America	941, 162		200, 651
China and Japan	106, 675	86, 914	
Australia	340, 608	194, 245	
Switzerland			
South Africa	95, 364	13, 720	
All other countries	559, 903	60, 606	
Total	102, 137, 203		

TRADE OF CANADA WITH THE UNITED STATES.

Statements showing the trade of Canada with the United States on the basis of dutiable and free goods entered for consumption for the fiscal year ending June 30, 1882, *and compared with* 1881.

AGGREGATE TRADE.

1882	$96, 229, 763
1881	73, 570, 337
Increase in 1882	22, 659, 426

VALUE OF TOTAL EXPORTS.

1882	$47,940,711
1881	36,866,225
Increase in 1882	11,074,486

VALUE OF TOTAL IMPORTS.

1882	$48,289,052
1881	36,704,112
Increase in 1882	11,584,940

DUTIES COLLECTED FROM THE UNITED STATES.

1882	$7,082,722 29
1881	5,657,292 75
Increase in 1882	1,425,429 54

Exhibits showing the provinces of Canada into which dutiable and free goods were imported from and exported to the United States, and their value, for the fiscal year 1882 *and compared with* 1881.

IMPORTS.

Provinces.	1882.	1881.	Increase, 1882.	Decrease, 1882.
Ontario	$21,291,032	$17,466,184	$3,824,848	.....
Quebec	15,169,917	11,262,195	3,907,722	.....
Nova Scotia	2,236,905	2,216,609	20,296	.....
New Brunswick	2,728,597	2,250,660	477,937	.....
Manitoba	4,396,478	1,485,696	2,910,782	.....
British Columbia	1,846,939	1,614,439	232,500	.....
Prince Edward Island	185,534	224,527	.....	$38,993
Northwest Territories	433,650	183,799	249,851	.....
Total	48,289,052	36,704,112	.....	.....

CHARACTER OF GOODS.

Dutiable	$32,941,061	$25,632,313	$7,308,748	.....
Free	15,347,991	11,071,799	4,276,192	.....
Total	48,289,052	36,704,112	.....	.....

EXPORTS.

Ontario	$29,007,263	$20,511,374	$8,495,889	.....
Quebec	6,288,399	5,376,555	911,844	.....
Nova Scotia	3,076,930	2,400,509	676,421	.....
New Brunswick	2,798,345	2,334,138	464,207	.....
Manitoba	102,422	123,871	.....	$21,449
British Columbia	1,573,661	1,572,249	412	.....
Prince Edward Island	628,183	556,971	71,212	.....
Northwest Territories	.....	2,431	.....	2,431
Gold and bullion	370,562	963,805	.....	593,243
Estimated amount short at inland ports	4,094,946	3,023,322	1,071,624	.....
Total	47,940,711	36,866,225	.....	.....

Exhibit showing the character and value of leading dutiable goods imported into Canada from the United States for the fiscal year 1882; *also, the increase and decrease, as compared with* 1881.

Articles.	1882.	Increase 1882.	Decrease 1882.
Animals, living:			
Horned cattle	$205, 665	$10, 205	
Horses	175, 863	181, 641	
Sheep	22, 402	7, 366	
Swine	21, 964	1, 028	
Swine slaughtered, total	403, 894		$131, 238
Swine entered for consumption	3, 020		29, 497
Baking powders	51, 790	17, 061	
Blacking	43, 982	21, 285	
Books, printed, &c	394, 115	84, 282	
Lithographs, bill-heads, checks, &c	127, 601		69, 286
Music	47, 485	11, 969	
Valentines, &c	41, 890	18, 897	
Braces and suspenders	23, 918	11, 152	
Brass, manufactures of:			
Bars, bolts, and sheets	15, 294		736
Wire	13, 398	3, 906	
Wire cloth	6, 785		743
Not specified	190, 061	56, 875	
Breadstuffs:			
Bread and biscuit	16, 466	2, 662	
Rice	31, 526		11, 429
Beans	13, 593	5, 784	
Indian corn, total	2, 439, 863		1, 165, 962
Indian corn entered for consumption	1, 142, 141	231, 953	
Oats	39, 180	3, 547	
Pease	5, 616	1, 924	
Wheat, total	1, 358, 560		6, 442. 994
Wheat entered for consumption	360, 023	305, 948	
Bran, millfeed, &c	32, 687	18, 542	
Indian cornmeal	416, 977		38, 219
Wheat flour, total	1, 071, 195		28, 686
Wheat flour entered for consumption	927, 537	21, 461	
Brick and tiles	38, 254	12, 279	
Building brick	17, 826	15, 476	
Drain tile	43, 136	17, 335	
Brooms	4, 259	1, 212	
Brushes	89, 887	10, 409	
Buttons	125, 104	5, 910	
Carriages:			
Road	154, 715	83, 837	
Railway	152, 914	138, 055	
Railway cars	147, 210	137, 887	
Sleighs and wagons	67, 155	21, 644	
Clocks	112, 137	41, 556	
Coal:			
Anthracite	2, 898, 659	578, 685	
Bituminous	1, 939, 835	335, 597	
Coke	32, 042	8, 887	
Coffee:			
Green	25, 919	4, 112	
Roasted	68, 761		7, 035
Collars, cuffs, and shirt fronts	23, 857	369	
Combs for dress and toilet	90, 704	36, 864	
Copper rods, bars, &c	40, 128	11, 064	
Cordage for ship purposes	76, 374		10, 779
Cotton, manufactures of:			
Sheetings, drills, duck, &c	534, 801	167, 610	
Ginghams and plaids	26, 641	15, 801	
Denims, &c	495, 484		127, 438
Wadding, batting, &c., not dyed	40, 551		4, 543
Wadding, batting, &c., dyed	17, 047		13, 229
Knitting yarn, &c., not dyed	28, 875	9, 804	
Knitting yarn, &c., dyed	23, 201	1, 257	
Seamless bags	12, 942	1, 441	
Hosiery, shirts, and drawers	35, 792	3, 094	
Sewing thread on spools	10, 148	2, 973	
Sewing thread in hanks	2, 234	577	
Duck for ship sails	184, 531		3, 385
Corsets, lace collars, &c	170, 949	24, 496	
Drugs:			
Patent medicines, liquid form	31, 537	11, 588	
Patent medicines, all others	87, 239	10, 114	
Earthen, china, and porcelain ware	59, 512	15, 993	
Fancy goods, toys, wooden and other	23, 026	8, 016	
Felt for roofing	10, 440	3, 219	
Fish preserved in oil	44, 248	20, 731	

Exhibit showing the character and value of leading dutiable goods imported into Canada from the United States, &c.—Continued.

Articles.	1882.	Increase 1882.	Decrease 1882.
Fruits:			
Dried apples	$14,428		$4,373
Currants, &c	36,021	$6,912	
Raisins	73,333		43,527
Green apples	42,851		25,513
Berries	12,920	1,739	
Cranberries, pluma, and quinces	22,771	3,584	
Grapes	16,318		92
Peaches	27,698		12,152
Oranges and lemons	146,242	53,427	
Fruit in cans, not sweetened	39,406	15,950	
Fruit in cans, sweetened	14,224	5,918	
Fur, and manufactures of	193,798	124,098	
Glass:			
Common window	15,490	12,944	
Lamps, chimneys, &c	138,117	17,643	
Gloves and mitts of cotton	8,753	3,790	
Gold and silver electro-plated ware	205,086	60,713	
Gunpowder, blasting and mining	24,639		168,026
Gutta-percha and India-rubber goods:			
Boots and shoes	53,910	4,253	
Belting	54,264	10,918	
Clothing except when part wool	47,487	25,054	
Hose and tubing	38,851	3,879	
Hats, caps, and bonnets:			
Beaver, silk, and felt	372,271		14,853
Straw, grass or chip	126,077		37,311
Hops	18,916	8,917	
Ink:			
Writing	11,002	4,682	
Printing	30,776	5,942	
Iron and steel, and manufactures of:			
Agricultural implements, reapers, &c	77,159	52,906	
Band and hoop	15,047	4,315	
Bars, rolled or hammered	40,653	6,827	
Boiler plates	36,357	11,192	
Bolts, washers, and rivets	38,110		6,810
Car wheels and axles	31,199	12,671	
Miscellaneous castings	253,930	51,754	
Cultivators and plows	104,155	66,702	
Engines, locomotive	811,889	656,299	
Engines, fire	5,655	2,916	
Engines, other and boilers	47,935	5,069	
Hardware	527,641	119,135	
Hollow ware	69,726	22,872	
Iron bridges	135,176		284,289
Locks	62,514	28,257	
Sewing machines	286,201	137,648	
Mowing machines, &c	11,895	518	
Threshing machines	14,417	264	
Malleable castings	34,201	11,000	
Mill irons	22,389	17,580	
Pig-iron	403,316	146,581	
Railway fish-plates	12,637	10,146	
Safes, doors, and vaults	20,964	11,067	
Scales	47,755	5,208	
Stoves	23,678	7,218	
Tubing, plain	29,464		16,792
Tubing, threaded	40,964	6,446	
Wire, iron and steel	57,463		13,434
Wire work, other	71,780	20,307	
Cutlery, other than penknives	77,248	29,495	
Files and rasps	16,319	9,777	
Muskets and other fire-arms	80,953	40,671	
Needles	20,179	3,269	
Shovels, spades, and hoes	51,829	12,416	
Saws	61,577	28,425	
Scythes	21,193		10,610
Other mechanical tools	200,742	78,821	
Jewelry, of gold, silver, and other metals	265,419	100,970	
Leather and manufactures of:			
Patent leather	33,514		14,924
Boots and shoes	137,098	49,673	
Harness and saddlery	40,941	21,759	
Gloves and mitts	30,697	18,550	
Leather belting	71,343	32,145	
Marble and manufactures of	93,846	20,159	
Metal and manufactures of:			
Britannia	59,373	43,587	
Gas, coal-oil fixtures	74,639	19,001	

Exhibit showing the character and value of leading dutiable goods imported into Canada from the United States, &c.—Continued.

Articles.	1882.	Increase 1882.	Decrease 1882.
Metal and manufactures of—Continued.			
German and nickel silver	$18,379	$8,806	
Type for printing	27,714	6,433	
Pewter, platina, &c	28,583		$3,931
Musical instruments:			
Organs	49,640	330	
Pianofortes, square	156,680		11,028
Pianofortes, upright	94,256	20,753	
Pianofortes, concert or parlor	28,781	11,023	
Other musical instruments	16,376	11,963	
Oils, mineral:			
Kerosene, naphtha, &c	396,386	131,147	
Products of petroleum	55,893	37,469	
Oils, animal:			
Lard	21,331	5,394	
Sperm	13,635	7,076	
Olive or salad	20,533		1,571
Oilcloth	134,437	61,738	
Paintings, drawings, &c	54,320	5,192	
Paints, ground in oil	64,499	15,607	
Paper:			
Writing and note	146,940	55,217	
Wall	115,964	29,057	
Envelopes, &c	197,918	37,398	
Printing	13,598	3,597	
Pencils, lead	29,179	3,620	
Perfumery	10,177	3,205	
Plants, fruit and ornamental trees	38,194		22,198
Provisions:			
Butter	69,720		6,822
Cheese	506,319		1,362
Lard	341,191		61,273
Bacon, hams, &c	452,697		73,821
Beef	136,652	42,390	
Pork	1,283,235	278,782	
Prepared meats	81,616	39,827	
Sails	28,858	19,109	
Seeds of all kinds:			
In bulk	154,714	100,067	
In small parcels	3,380		$7...
Silk:			
Dress goods	23,816	20,308	
Sewing and twist	40,973	20,400	
School and writing slates	10,520	39,992	
Soaps:			
Common	41,201	7,142	
Perfumed	17,698	3,429	
Starch	18,586	12,176	
Stationery	59,891	13,842	
Stone, grindstones	30,557		113,8...
Sugars:			
Sirups, molasses, and candies	550,730	8,911	
Glucose, or grape and sirups	30,817	3,951	
Tin cans, in packages	24,153	13,696	
Tobacco:			
Cigars and cigarettes	122,845	1,735	
Snuff	5,888		2,710
All other tobaccos	48,691	63,880	
Turpentine	166,601	1,032	
Trunks, saddles, &c	34,562	5,107	
Twines	28,997	14,486	
Varnish	60,095	10,444	
Vegetables:			
Prepared and preserved	33,752	14,906	
Sweet potatoes, and other vegetables	47,880	51,502	
Watches and cases	102,296	40,651	
Watches, movements	94,443		3,223
Whips	39,715	66,794	
Wood, and manufactures of:			
Furniture	184,244	66,794	
Shingles	41,262	13,805	
Woodenware	23,240	2,710	
Other manufactures of	775,785	310,348	
Lumber and timber	490,452	122,174	
Wools, manufactures of:			
Cassimeres	21,947	6,295	
Flannels	10,027		2,333
Knitted goods	19,470	6,790	
Clothing, ready made	25,420		2,221
Carpets	16,879		28,476

II.—NAVIGATION AND SHIPPING.

The navigation and shipping of Canada with all countries during the fiscal year ending June 30, 1882, is as follows:

SEA-GOING VESSELS.

Description.	Number of vessels.	Tons of freight.	Crew.
Entered inward	10,638	785,286	131,539
Cleared outward	10,500	1,458,524	130,963
Total	21,138	2,243,810	262,502

NATIONALITIES.

Description.	Number.	Tons.	Crew.
British	3,335	1,073,085	94,052
Canadian	11,355	744,662	81,661
Foreign	6,448	426,063	86,789
Total	21,138	2,243,810	262,502

Shipping of Canada with the United States.

SEA-GOING VESSELS UNDER THE UNITED STATES FLAG.

Description.	Number.	Tonnage.	Crew.
Arrived	2,387	950,453	32,190
Departed	2,260	934,201	31,437
Total	4,647	1,884,654	63,627

INLAND NAVIGATION BETWEEN CANADA AND THE UNITED STATES.

Description.	Number.	Tons of freight.	Crew.
Arrived	17,450	901,208	127,407
Departed	17,032	853,441	122,830
Total	34,482	1,754,649	350,237

BRITISH AND FOREIGN VESSELS EMPLOYED IN THE COASTING TRADE OF CANADA.

Description.	Number.	Tonnage.	Crew.
Arrived	37,996	7,515,476	366,446
Departed	37,770	7,275,588	368,462
Total	75,766	14,791,064	734,926

NAVIGATION OF CANADA WITH ALL COUNTRIES.

Statement (by provinces) showing the number of sea-going vessels, with the amount of freight reported inward and outward at the several ports of Canada, with all countries, during the fiscal year ending June 30, 1882.

ENTERED INWARD.

Provinces.	Number of vessels.	Tons of freight.	Crew.
Quebec	1,074	454,256	30,784
Nova Scotia	5,861	216,540	57,615
New Brunswick	3,422	100,201	27,549
British Columbia	557	.....	12,192
Prince Edward Island	224	14,289	2,208
Total	10,638	785,286	121,539

CLEARED OUTWARD.

Quebec	1,199	524,231	30,851
Nova Scotia	4,930	614,671	56,291
New Brunswick	3,474	54,927	27,923
British Columbia	541	208,799	12,974
Prince Edward Island	356	55,896	2,914
Total	10,500	1,458,524	130,953

NAVIGATION OF CANADA WITH THE UNITED STATES.

Statement (by provinces) showing the arrivals and departures of sea-going vessels under the United States flag, with tonnage and crews, to and from the ports of Canada for the fiscal year 1882.

ARRIVALS.

Provinces.	Number of vessels.	Tonnage.	Crew.
Quebec	4	4,259	68
Nova Scotia	738	222,410	9,720
New Brunswick	1,208	363,685	11,048
British Columbia	392	336,008	10,388
Prince Edward Island	45	24,131	958
Total	2,387	950,453	32,190

DEPARTURES.

Quebec	4	4,819	70
Nova Scotia	650	219,117	9,094
New Brunswick	1,173	365,965	11,105
British Columbia	384	319,769	10,264
Prince Edward Island	49	24,511	964
Total	2,260	934,201	31,437

INLAND NAVIGATION BETWEEN CANADA AND THE UNITED STATES.

Statement (by provinces) of the number, character, and crews of the United States and Canadian vessels, and the tons of freight entered inward and cleared outward at the ports of the undermentioned provinces, showing (exclusive of ferriage) the intercourse by inland navigation between the United States and Canada during the fiscal year 1882.

ENTERED INWARD.

Provinces.	Vessels.	Number.	Tons of freight.	Crew.
Ontario	United States:			
	Steam	2,731	30,862	23,978
	Sail	2,230	166,845	7,446
	Canadian:			
	Steam	4,691	92,229	59,917
	Sail	5,587	419,035	27,989
	Total	15,229	708,971	118,380
Quebec	United States:			
	Steam	115	256	782
	Sail	1,062	94,831	2,157
	Canadian:			
	Steam	290	35,217	3,356
	Sail	754	61,933	2,732
	Total	2,221	192,237	9,027

CLEARED OUTWARD.

Ontario	United States:			
	Steam	2,720	25,275	23,892
	Sail	2,266	111,560	7,491
	Canadian:			
	Steam	4,650	125,664	58,602
	Sail	5,711	549,703	26,015
	Total	15,347	812,208	116,000
Quebec	United States:			
	Steam	115	.....	784
	Sail	991	18,485	2,128
	Canadian:			
	Steam	221	22,348	2,780
	Sail	358	400	1,148
	Total	1,685	41,233	6,830

RECAPITULATION.

Arrived in Canada	17,450	901,208	127,407
Departed from Canada	17,032	853,441	122,830

VESSELS BUILT IN CANADA.

Statement (by provinces) showing the description, number, and tonnage of vessels built in Canada during the fiscal year ending June 30, 1882.

Provinces.	Steam.		Sail.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Ontario	26	1,522	35	4,526	61	6,048
Quebec	7	743	41	6,424	48	7,167
Nova Scotia	5	204	117	31,157	122	31,361
New Brunswick	2	43	54	17,592	56	17,635
British Columbia	7	1,852	1	60	8	1,912
Prince Edward Island	.....	.....	14	3,776	14	3,776
Manitoba	2	341	.....	.....	2	341
Total	49	4,705	262	63,535	311	68,240

R. B. ROBBINS,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Ottawa, March 12, 1883.

CONDITION AND PROGRESS OF SOUTH AUSTRALIA.

REPORT BY CONSULAR AGENT SMITH.

POPULATION AND WAGES.

The colony is again feeling the effects of a deficient harvest and a depressed copper market, but at the same time can point to a substantial progress in many other particulars, and to a fair advance on the whole. One great want is an increase in population. In this respect the advance has been very small during the past year, being little more than the excess of births over deaths, viz, 6,700; the total increase, including immigration, does not amount to 10,000, and the entire population of the colony is only about 300,000. The necessity for a larger working population especially has been seen in the high rate of wages which has prevailed, and the strikes which have taken place among railway navvies and port lumpers, who demand higher pay and shorter hours of work. One shilling per hour is now the rate, and eight hours the length of the working day.

RAILROADS AND PUBLIC WORKS.

The expenditure on public works in 1882 was £1,544,846, and the gross expenditure for the preceding thirty years £18,508,205.

The formal opening of the Great Northern Railway, 200 miles north from Port Augusta, took place on May 17, when several hundreds of colonists, including nearly all the members of the legislature, proceeded up the line to witness the ceremony which was performed by his excellency the governor. The bulk of the party traveled by rail from Adelaide to Quorn, a station about 230 miles north, where the opening ceremony and banquet took place. The entire length of the line from the city to the present terminus, Farina, is 406½ miles. A large extent of the country traversed is wild and barren, though used as pastoral country and abounding in minerals. This railway is considered only the first section of a line to go right across the continent to Port Darwin, in the northern territory. Already an extension of the line to Hergott Springs, 33 miles beyond Farina, is in progress, and is to be completed by February, 1884. The next railway in point of extent, which is now approaching completion, is that from the city to Nairne, a village about 25 miles in actual distance from Adelaide, but as a range of hills about 2,000 feet in height has to be crossed, a circuitous route has been adopted, making the length of the line about 39 miles. During the last session of parliament a bill was passed authorizing the continuation of this line to the border of the colony of Victoria, about 161 miles, at a cost of over a million sterling. This is a very important line, and is considered likely to help forward the proposed federation of the colonies. It is worthy of note that two long, curved, iron viaducts on this line, spanning two deep gullies in the hills about 8 miles from Adelaide, were procured from the United States. The iron supports have such an extremely light appearance that many persons expressed the opinion that they would not be found strong enough to bear the weight of the trains, especially as the bridges have a considerable curve. They were, however, subjected to a severe official test, in the

presence of most of the engineering talent of the colony, and the contractors' trains have, for two or three months, been running over them several times daily; they are, therefore, considered perfectly safe. The greatest height from the bottom of the gully to the bridge is 130 feet. A short line of railway, 7 miles, is proposed, to connect two inland towns, Gladstone and Laura; the cost is estimated at £47,300, which is by many thought too high for the nature of the country through which it passes and for the advantages to be secured.

While the railways have engaged so much of the public attention and public funds, ordinary roads have not been neglected, 600 miles having been constructed and rendered passable during the year, at a cost of £14,587. The sum of £26,207 has been expended by Government in constructing, extending, and repairing various jetties around the coast. This is independent of the large amounts expended by private enterprise, as in the case of the Largs Bay and Grange jetties.

There appears to have been some error in the statement given in last year's Government report as to the total length of railways open being 984 miles, unless the private lines and tramways were included. The total length of Government railways open at the end of 1882 was 942 miles, and 115 miles were in course of construction, independently of the 161 miles of railway authorized to be laid to the border of Victoria. Nearly 50 miles of private railways and tramways are in operation in the city, suburbs, and elsewhere, and proving very remunerative.

The insignificant stream called the Torrens, which runs through Adelaide, after purling along through picturesque scenery in the hills 40 miles to the east, has lately been formed into a fine and extensive ornamental sheet of water by the erection of a dam near the western side of the city, throwing back the water for nearly 2 miles in length.

MISCELLANEOUS.

Light-houses.—A new and powerful light of the first order was erected at Cape Northumberland last year, visible 20 miles; also at Cape Banks a revolving light, visible 12 miles, has been established; and after February 1, 1883, will appear a third-class order light at Point Lowley, visible 10 miles. Undoubtedly the protection given to shipping along the coast cannot be surpassed.

Vital statistics.—The total births throughout the colony in 1882 were, males, 5,589; females, 5,255; total, 10,844, being an increase of only 136 over the previous year, and about 3.6 of the population. The deaths were, males, 2,430; females, 1,963; total, 4,393, or 381 in excess of 1881. Excess of births over deaths, 6,451. The approximate number of marriages was 2,480.

Live stock.—The returns of live stock show an increase in all classes except pigs and goats. Sheep number 6,810,856, showing an increase over the previous year of 357,634, although many flock owners have suffered serious losses. Cattle number 314,918; increase, 11,883. Horses, 159,678; increase, 9,087. Goats, 11,971; decrease, 1,738. Pigs, 120,718; decrease, 6,408.

Mining.—The mining interest, though still depressed, shows a slight improvement over 1881. The returns of the first three quarters of the two years stand thus: 1881, copper, 1,734¼ tons; copper ore, 14,000 tons; total declared value, £223,806. For 1882, copper, 1,908¼ tons; copper ore, 18,230½ tons; total declared value, £270,922.

The gold exported during the first nine months of 1882 amounted to

764 ounces, valued at £3,080; the figures for the corresponding period of 1881 being 220 ounces and £880.

Wine growing is steadily improving. During the first nine months of 1881 the export was only 35,318 gallons, valued at £7,374, while for the corresponding period of 1882 the export was 47,545 gallons, valued at £13,280. The quality of South Australian wines is fully maintained, and steady improvement may be noticed from year to year. They were successful in taking several prizes at the recent exhibition at Bordeaux, in France, where they were very highly commended by the best judges in Europe. The failure of the vintage in the old wine-growing countries of Europe is likely to assist the introduction of the wines of the Australian colonies to the British and continental markets, which have hitherto drawn the bulk of their supplies from nearer home. One great advantage they will have in using the Australian wines, they will have the pure juice of the grape, in place of the chemical compounds too often sold as wine.

Ostrich farming.—A comparatively new industry to Australia has lately come to the front; it is that of ostrich farming. Several years ago Mr. J. B. Austin drew attention to the adaptability of South Australia to the raising of ostriches, and in 1878 a gentleman from the Cape brought three birds here on speculation. No one would buy them, and they were on board ship, about to be taken back, when Mr. Austin, hearing of them, induced a squatter to purchase them for £250, who kept them for about three years, and, though not very successful, managed to rear some thirty or more chicks, when a party bought the whole lot and established a well-appointed ostrich farm near Gawler, about 30 miles from Adelaide, and, having paid more attention to the birds, has been very successful, and recently increased his stock by the importation of 94 young birds from the Cape, having now, I believe, about 180 in all, promising to become a great source of profit from their valuable feathers. Parliament passed a bill last session for the encouragement of this new industry by granting blocks of land on specially favorable terms for the rearing of ostriches.

Volunteers.—The little volunteer force of South Australia numbers about 1,100 men, and are a remarkably efficient and soldierly body of men. The artillery especially is a most efficient arm of the service, numbering 180, and arrangements are being made for having a regular permanent artillery force of 50 men under an officer of the Royal Artillery. Another fort is being erected to guard the entrance to Port Adelaide, and will be mounted with heavy guns. A gunboat and torpedoes are ordered from England at a cost of over £80,000.

Telegraphs.—The telegraph business of the colony last year was considerable. The number of local messages sent was 492,031; of intercolonial, 199,525; and of cablegrams to and from South Australia, 5,824. Adelaide being the central station for the Overland European Telegraph and Cable Line, a large number of messages from the other colonies pass through Adelaide; the number from the other colonies was 19,458, and to the other colonies, 19,886. The value of the international traffic forwarded was £114,771, and of that received, £110,735. Telephones are in use between the city and Port Adelaide (7½ miles), and also within the limits of the city.

BANKS AND BANKING.

The banking returns have just come to hand, and show a considerable advance in business over those of the corresponding quarter (ending December 31) of the previous year.

There are nine banks trading in South Australia besides the savings banks, and their average liabilities for the three months ending December are thus stated:

LIABILITIES.

Description.	1882.	1881.
Notes in circulation	£538,229	£525,264
Bills in circulation	16,742	15,427
Balance due to other banks	80,929	72,347
Total deposits	5,140,768	4,942,555
Total average liabilities	5,776,668	5,555,593

ASSETS.

Coin and bullion	£973,603	£1,051,492
Government securities	55,000	55,000
Landed property and bank premises	347,642	312,336
Notes and bills from other banks	61,642	59,056
Notes and bills discounted and other debts to banks not before enumerated	9,180,494	6,741,690
Balance due from other banks	194,118	195,169
Total average	10,812,499	8,414,743

The savings-bank returns continue to show a steady increase in the business of that important and well-conducted institution. It may be remarked that the building in which its business is carried on is a large and handsome structure in the main street of Adelaide; it has been erected for several years, and when first built was the handsomest of all the banks in the city.

The balance-sheet of the savings bank for the twelve months ended June 30, 1882, shows that the amount received from depositors during that period was £1,044,438, and the amount paid out £822,633; these amounts being in excess of those of the previous year by £221,179 and £160,200, respectively. The total amount at the credit of depositors on June 30 was £1,529,641, being an increase on the previous year of £280,173; the average for each depositor being £36 1*s.* 9*d.* Number of depositors, 42,384, or 4,642 over the previous year.

Money having been very plentiful last year, the rate of interest allowed was only 4½ per cent, and that of interest charged on mortgages 5½ per cent It has just been raised to the old rate of 6 per cent. The reserve fund is £30,000. The amount lent on mortage £512,412, and on Government and corporation securities £482,392. The total expenses of rent, management, &c., were £6,406. There are branch offices of the savings bank connected with the post-offices at nearly every township in the colony.

SHIPS AND DOCKS.

Commercial business has been tolerably active during the year, and there has been a steady increase in the shipping trade.

Owing to some disagreement between the local government and the Orient Steam Navigation Company as to the postage paid them on letters, and as to the charges for pilotage and port dues, the company discontinued sending their fine vessels to Adelaide on their outward voyage, though they called on their return homeward.

Nevertheless, there has been an increase in the number of ocean steamers trading to this colony, and besides the regular fortnightly mail steamers of the Peninsular and Oriental Steam Navigation Com-

pany there are two regular lines of cargo steamers running monthly between England and the colony, and another between Germany and Adelaide via London, and the well-known Compagnie des Messageries Maritimes de France have just started a line of their fine steamers from Marseilles to Noumea, calling at Adelaide. The first vessel of this line (the Natal) arrived at this port on New Year's Day of the present year. The boats of the Orient Company are to resume calling at Adelaide also on the outward voyage.

In view of the large and rapidly increasing trade carried on by ocean steamers, several attempts have been made to provide accommodation for these vessels at the anchorage outside. A bill has been passed by Parliament granting certain rights and privileges to a powerful and wealthy company—the Ocean Dock Company—who are to construct a large ocean dock near the light-house outside the port.

A grant of 399 acres of the foreshore has been agreed to be made to the company on certain conditions; and they have to deposit £14,000 with the Government as security until £350,000 has been expended on the work.

The greater part of the capital required is in course of being obtained from England, and the work will be commenced without delay, which will enable vessels of any size to come from sea right into the dock; the depth intended will be obtained by dredging down to 30 feet low water, thus avoiding the delay and risk of proceeding up the creek, or lightering the goods to and fro outside, as at present. This is a work of very great magnitude and importance, not merely on account of the large expenditure of money involved in its construction, but because of the vast advantages it will give to Port Adelaide as affording a safe and commodious harbor for vessels of the largest size. The present port is perfectly safe, and affords a very large amount of wharf accommodation for vessels up to 2,000 tons burthen, but it is approached by a channel, several miles in length, having two bars over which it would not always be safe for large ocean steamers to pass; then, again, the ocean dock being quite outside the channel and close to the outer anchorage and light-house, and connected as it will be with the inner port by a couple of miles of railway, it will be for all practical purposes in as good a position as if it were alongside the existing wharves. The saving of time, expenses, and risk to the ocean steamers by the ocean dock will be very considerable, and cannot fail to offer inducements to vessels of that class to visit South Australia. The contemplated connection of Adelaide by railway with Melbourne and Sydney adds still more to the importance of the ocean dock for passengers, and goods arriving at Port Adelaide will in very few years be able to be forwarded direct from the vessel by rail to Sydney, the journey occupying less than three days; the undertaking will therefore benefit the other colonies as well as South Australia, and will no doubt be largely availed of by them, while at the same time the trade of the colony will be increased thereby. South Australia having a vast extent of coast line, a considerable amount of the carrying trade of the colony is done by means of small vessels, as schooners, ketches, and cutters; a fair amount of trade in wheat and other produce is also done with the neighboring colonies, South Africa, Mauritius, India, and New Zealand. Port Adelaide can boast a goodly register of shipping belonging to local owners. The small vessels, chiefly employed in the coasting trade, number 157, with an aggregate tonnage of 7,885; next in number is the steam fleet, of which there are 76, including about a dozen launches, as well as fine vessels from 400 to 1,000 tons, which trade to Melbourne and Sydney; the total tonnage is 6,716.

Of ships and barks there are 37, having an aggregate tonnage of 13,570. Brigantines number 10, with an aggregate tonnage of 2,150; besides these there are 9 hulks with a tonnage of 1,857. These are independent of a number of small craft belonging to the outports.

Government lands.—The total area of land alienated by the Government to the end of 1882 was 9,896,716 acres, of which 369,687 acres were sold during the last year. Of this, 331,736 acres were taken on credit, the purchase money amounting to £396,457. The total revenue from the sales of land in 1882 was £435,021, as against £651,914 in 1881.

Crops.—The area of land under cultivation in 1882 was 2,613,903 acres, being 39,414 acres over that of the previous year. Of this 1,768,781 acres were under wheat crops. The harvest is again a poor one, and will not exceed 4¾ bushels per acre, or say in round numbers 9,000,000 of bushels, which, after supplying our own wants for food and seed, will leave little over 5,000,000 of bushels for export, or about 135,000 tons. It is hardly fair to judge of the actual wheat-producing capabilities of the colony by the average yield, as a great deal of land is farmed in a very slovenly manner, and attempts are made to grow wheat in localities where neither soil nor climate is favorable.

Reservoirs.—The conservation of water is a matter of vital importance in a dry country like South Australia, and a considerable sum has been set apart for the construction of dams and reservoirs and the sinking of wells in the interior. The principal water-works in connection with the city and some of the chief inland towns are in a very satisfactory condition. The large reservoirs of Hope (not Slope as printed last year) Valley and Thorndon Park were estimated this season to contain more water than last, although the rainfall last year was considerably less than that of 1881. This is owing partly to the aid of other sources of supply, and partly to the fact of more water being allowed to flow into the reservoirs. Last year the two were estimated at the commencement of the hot weather to contain 701,000,000 gallons. This year the supply is estimated at 770,750,000 gallons. Last year there were one hundred and thirteen days during which no rain replenished the reservoirs; yet at the close of the dry season there were 150,000,000 gallons stored for the supply of the city and suburbs.

Sewage.—The work of constructing the drains to connect houses in the city with the sewers is still going on, though most of the sewers were completed long since. The sewage farm which receives the drainage of the city is becoming a success.

Olives and olive oil.—An important industry, which has hardly met with the attention it deserves, has for some years past been carried on by a few persons in the colony; it is the growth of olives and the manufacture of the oil.

Samuel Davenport, esq., J. P., who was a commissioner for South Australia at the Philadelphia Exhibition of 1876, and who has also represented the colony at the Paris, Vienna, Sydney, and other international exhibitions, has paid more attention to it than almost any one, and has been very successful in manufacturing a clear, pure, and sweet olive oil.

The sheriff of the colony, N. R. Boothby, esq., has also done good work in the same direction by utilizing the prison labor in the cultivation of the olive and production of the oil. Although at present only in a small way, the cultivation of the olive is bound to go ahead, and probably by and by will become an important source of profit, as the soil and climate are admirably adapted to the growth of this valuable tree. The olive plantations of South Australia are yet few and scattered, but they

annually advance. The tree grows and fruits well, favored by the dryness of the fruiting season and the total absence of severe frosts. The oil made is of excellent quality, as tested by the award it has commanded at various exhibitions (international), and by the ready sale it secures at high rates. The demand is yearly much in excess of the supply, so giving every encouragement to its increased production. The two or three existing mills work up all the fruit within available distances. Even without further plantations that supply will annually increase as young trees come into bearing, but the probability is that as the importance of the industry becomes better understood the area under olive cultivation will largely increase.

Education.—Education continues to make satisfactory progress; the attendance at all the schools under the board showing an increase over last year of nearly 50 per cent.; the numbers respectively are 20,745 and 29,873. There are besides numerous private schools, many of them of a high class.

Colonial debt.—Our colonial debt amounts to rather over £13,000,000 sterling, of which £9,000,000 have been expended in works which are or will be reproductive. The total public debt of all the Australian colonies, including New Zealand, is £96,000,000 sterling, but the gross annual product of Australian industry is £133,000,000, and our savings are much higher than those of England and France, and even more than those of America, so that the burden of our indebtedness does not press very heavily on the community.

STATISTICS OF SOUTH AUSTRALIA, 1882.

[Total imports £6,707,788; total exports £5,359,890.]

STAPLE BREADSTUFFS EXPORTED.

Cereals.	Quantity.	Value.
Barley.....bushels..	3,868	£722
Bran and pollard.....tons..	1,506	11,[illegible]
Flour.....do...	70,704	396,077
Oats.....bushels..	21,737	3,414
Wheat.....do ..	2,573,390	635,385
Wheat meal.....tons..	219	2,388
All other grain.....bushels..	608	132
Total.....	.....	1,551,106

WOOL EXPORTED.

	Bales.	Weight.	Value.
		Pounds.	
Staple.....	129,571	45,295,229	£1,818,537
Foreign.....	39,913	12,631,077	582,026
	169,484	57,926,306	2,400,563

Metals and minerals exported in the year 1882.

Articles.	Quantity.	Value.
Metal:		
Copper ..... tons..	3,647	£259,884
Gold ..... ounces..	764	3,080
Spelter ..... tons..	31	845
Ore:		
Copper ..... tons..	25,897	195,686
Lead ..... do...	82	2,111
Manganese ..... do...	136	664
Total	.....	462,270

J. W. SMITH,
Consular Agent.

UNITED STATES CONSULAR AGENCY.
Adalaide, South Australia.

FIRES IN EUROPEAN AND AMERICAN CITIES.

REPORT BY CONSUL KING, OF BIRMINGHAM.

I have been surprised during my residence abroad by the comparative infrequency of fires in the towns where I have lived.

If I be not mistaken the amount of property annually destroyed in civililized Europe by fires is much less than the amount in the United States, whilst the number and cost of organizations and appliances for fighting the flames are greater in America. I have just received the annual report of the watch committee of this town "upon the operations of the fire brigade during the year 1882," and I have also visited the central fire station, where the superintendent most courteously explained to me all the workings of the system in use here, and showed me the buildings and apparatus. This central building is new, handsome, and conveniently arranged. It includes separate residences for a number of married firemen with families, each having a living room, two bedrooms and coal vault, with laundry and drying place on the roof; also accommodations for several bachelors, and a pleasant recreation room, with a library, bagatelle-board, &c. In the stables were five horses, and there, as elsewhere, everything was in excellent order. There was one steam fire-engine and three hand fire-engines; one tender; a horse hose-cart and a hand hose-cart; six large hand pumps, and seven small hand pumps; two telescopic fire-escapes, and one fly-ladder escape. I saw also an excellent supply of hose fitted with a simple and effective coupling known as the Morris patent. There was also a high tower for draining and drying hose. Everything was very good of its kind and in excellent condition. The substantial and practical fire-escapes had been made in the workshops on the premises by the firemen themselves. But the chief impression made upon me during the visit was that while what was there was admirable, there was so little there. This was the chief station for a town of nearly half a million of inhabitants, covering a large acreage, with radii in most directions of three miles. There certainly are eight other fire stations in various parts of the town, but their supply of apparatus is even more remarkable. Two are supplied with one hand engine each,

two have only a fire-escape each, and the others have only hose carriages or hand pumps. Thus it will be seen that the whole brigade of the town has but one steam and four fire engines. This seems to be altogether insufficient for the proper protection of one of the largest and busiest factory towns in the world. But what are the results? In 1882 there were 193 alarms of fire in the borough of Birmingham, and of these alarms, twelve were false, and thirty were for burning chimneys only, so that 151 actual fires remain. The estimated damage done by fire during the year was £11,873. Upon inquiry I was told that in accomplishing this result, which seemed to me to be a brilliant one, the fire engines were not used at all. Small portable hand-pumps, and the pressure—about 40 pounds to the square inch—of the water at the fire-plugs, were the means relied upon when buckets did not suffice, and it may be presumed that the damage done by water was not great. I fear there are many American cities of half the size of Birmingham where such a showing as this would be impossible, and it would be well if the reasons for the difference could be found, and advantage taken of the discovery.

I have no doubt that the moisture of the climate is partly responsible for these results, but it is not wholly so, for I have noticed that fires are also less frequent and less destructive in cities in Germany than in American towns, where the excellence of the fire departments is notorious. I find what I think two good reasons for this difference: One, and it is an important one, is the nature of the roofing material in ordinary use. In most parts of America, wooden shingles, or compositions chiefly made up of tar, are largely used. In Birmingham the use of such material is against the law, which is strictly enforced; and I may here say that in Bremen, where I had the honor of once being consul, a law against inflammable roofing was made in the sixteenth century and has been strictly enforced ever since. I am unable to state the proportion of American fires resulting from sparks falling upon tinder-like roofs, but I think it must be large.

In this place I may express my surprise that the cheap, picturesque, and fire-proof red tiles, in general use throughout Europe, have never been largely introduced or *manufactured* in our country.

The second reason, to which I referred above, is the general custom of separating houses by thick fire-walls, extending above the roofs. These have generally proved to be most useful in confining a fire to the house where it originates, and the stress laid upon this and other precautions against fire by official building inspectors in recent years has not been without good results. There can be no doubt that faults of building cause many fires, and the increased carefulness of building inspectors may reduce the number of fires in the future.

Of the 151 fires in Birmingham last year, 38 were caused by timber used in construction being too near the fire-places, and 29 others originated in furnaces or stoves, whilst 6 arose from defective gas-fittings, and only 6 are put down to incendiarism. As a result of all this, I may give my opinion that the existence of laws which have proved to be wise, and the careful enforcement of those laws by the local authorities, have had much if not most to do with reducing the number of fires and the amount of property destroyed by them, and that I have found that the same causes produced similar effects in Germany as well as in England.

WILSON KING,
Consul.

CONSULATE OF THE UNITED STATES,
Birmingham, March 2, 1883.

IMPORTATION OF WINES AT BORDEAUX.

REPORT BY CONSUL ROOSEVELT.

The following is an official statement of the importation of wines at Bordeaux during the last six years, and the respective share of each wine-producing country in the importation necessary to make good the deficit in the native yield:

Years.	From—				
	Spain.	Italy.	Hungary.	Other countries.	Total.
	Hectoliters.	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*	*Hectoliters.*
1877	.....	.....	.....	71,000	71,000
1878	.....	.....	.....	174,000	174,000
1879	271,000	400	.....	1,600	273,000
1880	644,540	21,967	12,053	35,954	714,514
1881	837,103	34,249	20,206	218,359	1,109,918
1882	794,960	21,050	12,000	221,450	1,049,460

The importation of foreign wines increases in a direct ratio with the decrease in the production of the French vineyards. After the unrivaled yield of 1875 there was up to 1877 only the small amount of 71,000 hectoliters imported, as the cellars were still stocked with a portion of the bountiful harvest of that year. From 1879 to 1881 the yield reached a yearly average of about 30,000,000 hectoliters. The consumption being greater than the production, merchants were compelled to import from other countries to supply the deficit. Thus it will be seen, by reference to the above table, that against 273,000 hectoliters imported in 1879 there is 1,109,918 hectoliters in 1881. The harvest of 1881 was comparatively a good one, and the importation for 1882 consequently shows a decrease of 60,458 hectoliters compared with the corresponding period of 1881. France only asks from other countries the absolute amount necessary to meet the demands of trade. On account of Spain being the nearest wine-growing country and transport prices being low, she believes that her wines, however indifferently made, must find ready sale, as France absolutely needs them. Hence, the exportation of wine from Spain to France for the past three years has exceeded that of any other country, principally due to the poor yield in Italy and Hungary, which caused the wines of those countries to be placed at figures too high to induce French merchants to buy; they therefore sought from other markets wines at prices more proportionate to the exigencies of trade.

There was a general decrease in the importation of wines in 1882, Spain showing a decrease of more than 5 per cent. I may state, however, that the wines of Portugal (which come under the head of "other countries") show a decided yearly increase, as they are of good quality, and more than any other approach the French wines in excellence.

GEO. W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, February 13, 1883.

TRADE BETWEEN JAPAN AND COREA.

REPORT BY MINISTER BINGHAM, OF TOKEI.

I beg leave to inclose for your information a publication, made in the Japan Weekly Mail of the 25th instant, upon the Japanese trade with Corea, which you will observe is compiled from trade summaries furnished by the Japanese consuls resident at the open ports of Corea, and published by His Japanese Majesty's bureau of customs. These returns cover a period of five years ended June 30, 1882.

By these summaries it appears that the entire foreign trade of Corea during the whole period of five years amounted in value to, paper yen, 9,078,296, and that the value of that carried on at the principal open port, Fusan, was 7,210,547 yen. A reference to article IV shows that within the period named the total value of gold (understood to be gold dust) exported within the period was 972,242 yen, and that it is stated in the summary that gold "may be regarded as likely to appear regularly to a large extent among the staple exports of Corea."

I have heretofore called your attention to the accredited report that Corea is probably rich in gold and other metals.

JNO. A. BINGHAM,
Minister.

UNITED STATES LEGATION,
Tokei, Japan, November 27, 1882.

JAPANESE TRADE WITH COREA.

The accompanying returns of the Japanese trade with Corea during a period of five years ended on the 30th of June, 1882, have been compiled from trade summaries furnished by the Japanese consuls resident at the open ports and published by the bureau of customs. During the greater portion of this period the only port open to Japanese trade was that of Pu-san (Jap. Fusan), but that of Wön-san (Jap. Gensan) having been also opened on the 1st of July, 1880, the figures from that date represent the trade that has since been carried on at both places.

The returns are as follows:

1. General summary of the Japanese import and export trade with Corea.
2. Return of articles of Japanese production imported into Corea.
3. Return of articles of foreign production imported into Corea.
4. Return of the export trade with Corea.
5. Return of Japanese shipping (of foreign and native build) entered and cleared at the open ports of Corea.

General summary of the Japanese import and export trade with Corea.

By this summary it will be seen that a steady progressive increase took place in the foreign trade of Corea from the date at which the returns commence down to the end of 1881, the trade for the first half of 1882 showing, however, a slight falling off, when compared with that for 1881, though at the same time it is proportionately much larger than the total amount of the trade for any year previous to that last mentioned. During the year July 1, 1877–June 30, 1878, the value of the entire trade amounted only to 348,092 yen, while in 1881 it reached the comparative large total of 3,827,394 yen, thus showing an increase of more than ten-fold. Of the entire trade during the whole period, which amounts to 9,078,296 yen; the value of that carried on at the port of Pu-san alone is 7,210,547 yen, the balance of 2,597,748 yen having been conducted at the more recently opened port of Wön-san. The comparative values of the import and

export trade at the two ports during the year 1881 and the first half of 1882 are as follows:

	1881.	1882 (to June 30).
	Yen.	*Yen.*
Pu-san	2, 385, 152	867, 410
Wŏn-san	1, 442, 242	772, 377
Total	3, 827, 394	1, 639, 787

The trade of Wŏn-san having during the period that it has been opened to Japan reached an average annual value of considerably over a million yen, might perhaps be considered to promise well for the future development of the port. Notwithstanding, however, that it has a well-sheltered harbor which is easy of access, it is probable that it will soon lose a considerable portion of the trade it now possesses. The goods that have been imported into it hitherto have been destined almost entirely for the capital, to which their transport on pack horses takes a period of about six days, and it is manifest that when once a port close to the capital is opened, as will shortly be the case, this trade will be diverted from Wŏn-san. The country around the latter is of a mountainous nature, very sparsely populated and badly cultivated, and though the Coreans themselves consider the town to be one of much importance as a seat of trade, the Japanese describe its appearance as exceedingly poor, and they have found the settlement they have established there extremely unhealthy. With regard to Pu-san, on the other hand, it is probable that unless it should be surpassed by the port to be opened near the capital, it will prove at first to be the chief depot of whatever foreign trade Corea may carry on. It possesses many advantages in its close proximity to Japan and, relatively speaking, to the chief centers of trade in China, its climatic conditions and fine harbor. It is, besides, situated in the southeastern extremity of the province of Kyŏng-sang-do, which, together with the two adjoining provinces of Chhung-chhŏng-do and Chŏl-la-do, are the most populous in the country, and all three are reported to be well cultivated throughout. The figures of the trade which has taken place at Pu-san, so far, compare very favorably with those of most of the ports in China that have been opened to foreign trade during the last six years, while they far exceed those of Hakodadi in Japan. In estimating them it should be remembered that, up to the present, trade in Corea has been hampered by many difficulties which it may be hoped will in time gradually disappear. Chief among these is the almost utter want of a medium of exchange, the only representative of a coinage being, so far as is known, cumbrous copper coins, so difficult of transport that most transactions have hitherto had to be conducted by the primitive system of barter.

Return of articles of Japanese production imported into Corea.

The total value of Japanese products imported into Corea during the five years amounts only to 537,846 yen, or less than one-eighth of the total import trade, and of this over one-third consisted of copper, which seems from the return to be the only item of any importance. The value of the products classed under the heading of "miscellaneous" amounts to 109,405 yen, or nearly one-third of the remaining imports after the value of copper has been deducted, but from the Japanese summaries it would seem that the articles thus classified consisted mainly of supplies for the use of the Japanese residents in Corea, such as vermicelli, confectionery, drugs, soy, provisions, oil, tobacco, matting, paper, clothing, furniture, and a host of other articles, all imported in small quantities. To judge from the information afforded by this return there is little prospect of Japanese products being largely consumed in Corea, if the item of copper be excepted, as, of the two staple products of Japan, viz, silk and tea, such quantity of the latter as the Coreans may require will in all probability be always obtained from China, while silk would appear not to be required by Corea from abroad—the small amount of silk manufactures imported having been probably consumed by Japanese residents or by the higher classes of Coreans only—as it was exported to some extent both in its raw state and in the coarse manufactured form of pongee.

Return of articles of foreign production imported into Corea.

The value of the articles enumerated in this return reaches the large total of 4,065,591 yen, and the progressive increase that has been spoken of as having taken place in the total trade down to the end of the year 1881 is here largely apparent, especially

in the chief item of cotton manufactures. The value of the latter in the first year under review amounted to 116,624 yen, while in 1881 it reached 1,521,812 yen, the principal item being shirtings, which were imported in the last-mentioned year to the extent of 903,770 yen. Almost all these goods would appear to be of the coarser class of English manufacture and to have been purchased in Shanghai and transshipped at Nagasaki to vessels bound for Corea, or else to have been shipped direct from Kobe to Corean ports. As soon, however, as Corea is opened to foreign trade in general Japan will probably cease to participate in this trade, unless in the mean time a drawback system should be established by the customs, as Japanese dealers would be placed at a great disadvantage, as compared with Chinese and other foreign traders, by being burdened in the first instance by the payment of import duty in their own country. The Coreans, notwithstanding their general poverty, are a remarkably well clad people. They dress for the most part in white, and as they appear to grow but little cotton and to possess only rude hand-looms, it may be expected that they will readily purchase, to the extent of their means, cheap British cottons of strong and durable texture.

Return of the export trade of Corea.

The total value of the exports during the period of five years was 5,104,859 yen, and this amount, when compared with that of the imports, leaves, according to the ordinary acceptation of the term, a balance of trade in favor of Corea of 501,422 yen. As no mention is made in the returns published by the bureau of customs of any treasure having been imported into Corea, and in the absence of precise information as to how the values of imports and exports have been calculated, it would appear that this balance marks the profit on the trade which has accrued to Japan. Of the articles enumerated in the return, the most important, as judged by the value of the quantity exported, were rice, gold (principally dust), hides, and beans and peas.

The first mentioned, rice, was exported to the value of 1,529,636 yen during the five years. This amount gives a yearly average of 309,879 yen, but, so far from this average being maintained, a reference to the return will show that the trade in this staple has been of the most fluctuating nature, rising from 22,367 yen during the last half of 1878 to 351,494 yen in 1879, and 727,996 yen in 1880, and falling to 381,295 yen in 1881, and again to 16,487 yen during the first half of the present year. The decrease in 1881 as compared with 1880 thus amounts to 346,701 yen, notwithstanding which the total value of the export trade during the former year exceeded that of 1880 by 508,986 yen, and was little less than treble that of 1879. The slight falling off that has taken place in the total value of the exports for the first half of the present year, when judged relatively with that of 1880, is more than accounted for by the decrease in the the value of the rice exported, which amounts to 174,160 yen.

It may seem singular that the Japanese should find it profitable to import rice from Corea to the extent they appear to have done when it is remembered that it is produced in Japan to an extent that exceeds the requirements of the people, and that the native shipping has proved inadequate for its transport from the principal places of production in Japan to the foreign markets. From such information, however, as can be gathered from Coreans who have from time to time visited Tokio, it appears that the price of rice in Corea is barely one-third of what it is in Japan, and as the greatest quantity that has been imported in any one year is, though large in itself, infinitesimal compared with Japanese consumption, it is a matter of surprise that it has not been imported to a much greater extent while its relative values in the two countries continue as at present. This again is explained by the vexatious restrictions which are placed upon its sale by Corean officials in their dread that its export, if freely permitted, might increase to such an extent as to leave behind an insufficient supply for the wants of their own people. The price at which it could be purchased by the latter would in that case be abnormally increased, and rice being the staple food of the country, as much as it is in Japan, its increased cost would entail a proportionate rise in the prices of all the other necessaries of life. Great distress might consequently be entailed upon the people at large, while only a few would be immediately benefited. The obstacles which the officials influenced by these ideas have interposed to prevent the free sale of rice to Japanese traders have been so great that what has taken place has been effected almost entirely surreptitiously, the rice being smuggled into the Japanese settlements in small quantities at frequent intervals. According to the reports that were received during the early part of the present year from Japanese residents in Corea, an unusually bad harvest was anticipated, though later information shows that these anticipations have not been realized. The falling off that has taken place in the export of rice may therefore have been occasioned by greater restrictions having been placed upon its sale by the officials in their fear of scarcity rather than by unremunerative returns in the case of the shipments made in

previous years to Japan. During the year 1881 rice was exported from Japan, principally to Australia, where it finds a ready market, to the value of $261,735, and this export might be greatly increased were it not for the expenses attendant upon its transport from the producing districts to the ports at which alone foreigners can purchase it. Should, therefore, its present low price in Corea continue, and the Corean officials be brought to see the fallacy of checking the development of native agricultural industry, as it may be naturally hoped they will, when they acquire broader economical ideas from their intercourse with western nations, a considerable trade in this staple, profitable to both sellers and buyers, may be looked for in years of prosperous harvest, if not with Japan with other countries of the world.

The other articles above mentioned, viz, gold, hides, and beans and peas, all show a steady, progressive increase from the first year under review down to the present, and they may all be regarded as likely to appear regularly to a large extent among the staple exports of Corea.

No mention is made in the return of any export of timber, but judging from the information yet received in regard to Corea it would appear to be possessed of a considerable forest growth, and the commissioner of customs at Newchwang, in his report on the trade of that port for the year 1875, makes especial reference to this subject. He describes the existence of large forests on the confines of Corea towards China, and also the ample means afforded by the river Yah (*Kor.* Am-nok kang), which forms the boundary between China and Corea, of transporting to the sea the timber obtainable therefrom. Owing to the deforestation that has taken place in Japan, the price of timber suitable for building purposes has, during the past few years, increased over three-fold, its cost being now almost double what it is in England, whereas not many years have elapsed since it was little more than half. Steps have been taken by the Japanese Government to remedy this evil by planting trees abundantly throughout the country, but it is only future generations that can benefit thereby, and in the mean time Japan will probably be compelled to look to foreign countries for a supply. If Corea is able to meet her wants in this respect a considerable export may be looked for. A large demand both for Corean rice and Corean timber may also spring up in Northern China.

Return of Japanese shipping (of native and foreign build) entered and cleared at the open ports of Corea.

This return is only continued down to the end of the year 1881, no information being as yet obtainable in regard to the shipping for the present year. It shows that the tonnage in vessels of foreign build increased from 1,899 tons entered and the same number cleared in the year ended June 30, 1878, to 27,555 tons entered and 27,047 tons cleared in 1880. The steam tonnage is confined almost entirely to vessels of the Mitsu Bishi Steamship Company, which make regular trips from Kobe and Nagasaki to the Corean ports, while that of sailing vessels consist for the most part of small schooners that ply fom Nagasaki and Shimonoseki. In 1881, 496 Japanese junks and boats entered and cleared, of a carrying capacity of 46,858 koku, or, roughly estimated, 5,857 tons. The total tonnage of vessels of all classes entered and cleared during the year 1881 was about 60,459 tons, which was divided between the two ports of Pu-san and Wön-san as follows:

Port.	Steamers.	Sailing vessels.	Junks.	Total.
Pu-san	25,823	19,669	5,703	51,195
Wön-san	7,852	1,258	154	7,264
Total	22,675	20,927	5,857	70,459

HER BRITANNIC MAJESTY'S LEGATION,
Tokio, November, 1882.

[NOTE.—All the amounts mentioned in the following returns are stated in Japanese paper currency.]

I.—*Return of the Japanese trade with Corea during five years, from July 1, 1877, to June 30, 1882.*

	July 1, 1877, to June 30, 1878.	July 1 to December 31, 1878.	1879.	1880.	1881.	January 1 to June 30, 1882.	Total.
	Yen.	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*
Imports:							
Japanese productions.	87, 149	29, 332	55, 647	116, 130	202, 069	47, 519	537, 846
Foreign productions..	141, 405	113, 286	511, 306	861, 883	1, 742, 668	695, 043	4, 065, 591
Total import trade.....	228, 554	142, 618	566, 953	978, 013	1, 944, 737	742, 562	4, 603, 437
Total export trade.....	119, 538	154, 707	677, 061	1, 373, 671	1, 882, 657	897, 225	5, 104, 859
Grand total.....	348, 092	297, 325	1, 244, 014	2, 351, 684	3, 827, 394	1, 639, 787	9, 708, 296

II.—*Return of the import trade of Corea for five years, from July 1, 1877, to June 30, 1882.*

ARTICLES OF JAPANESE PRODUCTION.

Articles.	July 1, 1877, to June 30, 1878.	July 1 to December 31, 1878.	1879.	1880.	1881.	January 1 to June 30, 1882.	Totals.
	Yen.	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*
Coppor.....	22, 105	7, 190	20, 155	44, 861	87, 134	16, 464	197, 909
Earthenware and porcelain	.....	.....	.....	965	4, 376	2, 062	7, 403
Hemp cloth (Kibira)....	1, 635	7, 373	870	105	.....	.....	9, 983
Ironware.....	.....	.....	.....	804	6, 147	911	7, 862
Lacquered ware.....	.....	.....	.....	1, 145	5, 932	990	8, 067
Liquor (Japanese)	2, 257	1, 229	4, 446	14, 072	751	.....	22, 755
Machinery	.....	.....	.....	.....	2, 980	.....	2, 980
Matches.....	592	.....	1, 347	10, 162	8, 843	1, 318	22, 262
Mirrors	133	124	1, 322	1, 887	2, 065	.....	6, 536
Mosquito netting	245	.....	279	2, 237	.....	.....	2, 761
Rice	22, 692	.....	.....	.....	.....	.....	22, 692
Silk lustring.....	9, 586	3, 121	5, 622	8, 805	39, 516	9, 285	75, 935
Silk manufactures.....	1, 751	.....	3, 313	9, 215	13, 320	2, 118	29, 717
Tin	2, 966	2, 640	.....	.....	190	870	6, 666
Umbrellas.....	391	246	946	1, 141	1, 736	461	4, 921
Miscellaneous	22, 796	7, 412	16, 847	22, 968	26, 842	13, 040	109, 905
Total	87, 149	29, 332	55, 647	116, 130	202, 069	47, 519	537, 846

III.—*Return of the import trade of Corea for five years, from July 1, 1877, to June 30, 1882.*

ARTICLES OF FOREIGN PRODUCTION.

Articles.	July 1, 1877, to June 30, 1878.	July 1 to December 31, 1878.	1879.	1880.	1881.	January 1 to June 30, 1882.	Total.
	Yen.	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*
Camlets	.....	.....	.....	4, 915	31, 030	2, 874	38, 819
Copper coin	.....	.....	.....	.....	.....	37, 681	37, 681
Cotton manufactures:							
Cambrics and lawns.	3, 518	8, 500	72, 433	105, 105	511, 952	205, 938	907, 446
Shirtings	92, 145	73, 584	354, 892	546, 788	903, 770	334, 811	2, 305, 990
T-cloths	19, 902	12, 318	28, 573	76, 066	14, 598	.....	151, 457
Various	1, 059	1, 217	3, 666	12, 420	91, 492	35, 616	145, 470
Cotton, raw	9, 164	614	2, 250	8, 675	.....	.....	20, 703
Cotton yarn	1, 685	1, 151	14, 276	19, 243	2, 048	.....	38, 403
Drugs.....	.....	.....	834	775	11, 487	5, 076	18, 172
Dyes	11, 809	6, 549	24, 167	40, 789	75, 295	22, 280	180, 889
Glass.....	.....	1, 292	2, 377	546	4, 359	1, 021	9, 595
Guns	.....	5, 865	.....	2, 739	.....	.....	8, 604
Nickel	1, 205	.....	1, 399	7, 612	17, 559	.....	27, 775
Silk manufactures	.....	.....	.....	1, 801	3, 717	7, 819	13, 337
Tin	.....	.....	486	23, 854	35, 943	7, 411	67, 694
Zinc.....	918	.....	.....	3, 563	5, 507	608	10, 596
Miscellaneous	.....	2, 196	5, 953	6, 992	33, 911	33, 908	82, 960
Total	141, 405	113, 286	511, 306	861, 883	1, 742, 668	695, 043	4, 065, 591

IV.—*Return of the export trade of Corea for five years, from July 1, 1877, to June 30, 1882.*

Articles.	July 1, 1877, to June 30, 1878.	July 1 to December 31, 1878.	1879.	1880.	1881.	January 1 to June 30, 1882.	Total.
	Yen.	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*	*Yen.*
Awabi shells	.....	.....	2,123	5,556	9,827	1,782	19,298
Beans and pease	16,022	13,309	99,122	119,246	199,060	110,293	557,057
Bêche-de-Mer	1,704	8,103	16,333	18,034	60,584	66,624	171,382
Bones	5,297	7,359	12,721	18,570	13,782	9,402	67,131
Bronzes	1,528	1,937	1,442	937	1,512	.....	7,356
Cotton cloth	.....	.....	.....	995	14,043	52,137	67,175
Fish, dried	1,655	2,438	16,608	29,585	20,630	15,704	86,620
Ginseng	544	2,014	2,816	8,325	46,019	484	60,202
Gold	12,221	17,727	54,263	113,517	468,380	306,134	972,242
Hair	.....	.....	.....	.....	.....	4,432	4,432
Hemp and hemp manufactures	.....	.....	.....	10,092	33,250	.....	43,342
Hides	19,546	50,450	59,229	193,133	330,437	176,337	829,132
Medicines	.....	.....	.....	506	26,731	21,568	48,805
Oil cake	.....	.....	566	1,806	3,238	3,785	9,395
Rice	29,997	22,367	351,494	727,996	381,295	16,487	1,529,636
Silk:							
Raw	4,921	9,673	8,833	71,266	73,670	6,256	174,019
Pongee	12,840	1,278	1,972	3,236	38,685	4,432	62,463
Seaweed	4,619	7,215	21,705	27,724	86,130	30,634	178,018
Silver	1,238	2,830	10,624	3,929	42,251	26,184	87,056
Miscellaneous	7,415	8,007	17,200	19,218	33,733	44,525	130,098
Total	119,538	154,707	677,061	1,373,671	1,882,657	897,225	5,104,859

V.—*Return of Japanese shipping of foreign and native build entered and cleared at the open ports of Corea during five years, from July 1, 1877, to June 30, 1882.*

ENTERED.

	July 1, 1877, to June 30, 1878.		July 1, 1878, to December 31, 1878.		1879.		1880.		1881.*		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Steamers	10	1,899	7	1,306	30	6,475	89	12,548	51	16,938	137	39,166
Sailing vessels	.....	.....	.....	.....	11	783	118	10,024	135	10,617	264	21,424
Total vessels foreign build	10	1,899	7	1,306	41	7,258	157	22,572	186	27,555	401	60,590
		Koku.		*Koku.*		*Koku.*		*Koku.*		*Koku.*		*Koku.*
Junks and boats of native build	210	19,194	136	14,025	644	60,262	495	49,058	232	22,084	1,718	164,623

CLEARED.

	July 1, 1877, to June 30, 1878.		July 1, 1878, to December 31, 1878.		1879.		1880.		1881.*		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Steamers	10	1,899	7	1,306	29	6,690	40	13,004	50	16,737	136	39,636
Sailing vessels	.....	.....	.....	.....	9	628	121	9,586	132	10,310	262	20,524
Total vessels foreign build	10	1,899	7	1,306	38	7,318	161	22,590	182	27,047	398	60,160
		Koku.		*Koku.*		*Koku.*		*Koku.*		*Koku.*		
Junks and boats of native build	218	20,250	130	14,006	619	56,505	558	55,633	264	24,774	1,789	171,168

* No returns for 1882.

NOTE.—The koku is equal to about one-eighth of a ton.

SUBSIDIES TO STEAMSHIPS IN EUROPE.

REPORT BY CONSUL CRAIN, OF MILAN, ON THE HISTORY AND EXTENT OF SUBSIDIES GRANTED TO OCEAN STEAMSHIPS BY FRANCE, AUSTRIA-HUNGARY, SPAIN, ENGLAND, BELGIUM, HOLLAND, SWEDEN, NORWAY, ITALY, AND GERMANY.

The Government at Rome, for its guidance in the preparation of measures to aid the Italian commercial marine, has recently caused investigations touching past and present subventions to merchant steamship lines by other nations. The data furnished by these researches embrace the history and extent of subsidies as to most European countries, and the scope of the various lines.

FRENCH SUBSIDIES.

The law of August 16, 1879, authorized the minister of the postal and telegraphic department to accord an annual subvention of 1,200,000 francs for a period of fifteen years to steamships which should run the following lines: Line from Port Vendres to Algiers; Algiers to Bona; Marseilles to Oran; Port Vendres to Oran; Marseilles to Philippeville; Marseilles-Bona to Tunis; Tunis to Tripoli.

The principal conditions were that a new semi-monthly line should be established between Oran and Tangiers, touching Nemours, Malaga, and Gibraltar, and optionally Melilla; that the service of the aforesaid lines should be weekly going and returning, except for the Marseilles–Algiers and Marseilles–Philippeville lines, which should be semi-weekly; the ships to be new, or sea-worthy, of not less than 400 tons register for voyages between France and Algiers and of 200 for voyages along the Barbary coast; to be run according to the line, 12, 10, or 9 knots per hour, with a forfeiture of 50 francs per hour for every delay not justified. The act of concession also regulated the mail service, treatment of passengers, transport of merchandise, &c., and exacted 350,000 francs security; it stipulated that the payment of subsidy be monthly, but forbids the company to cede any part of the service to another without the express consent of the minister. The service was assumed by the General Transatlantic Company from July 1, 1880, to June 30, 1895, for an annual subsidy of 493,500 francs.

From February 20, 1858, Mr. Marzion, director of the Union Maritime Company, was the recognized grantee of the transatlantic postal service between France, the United States, and the Antilles, operated by two lines, one from Havre to New York, the other from St. Nazaire to the Antilles and Aspinwall, with subsidiary lines to Guadeloupe, to Mexico, and Caen. Afterwards Mr. Emile Periere (Mr. Marzion having given up the service), under the law of June 7, 1857, accepted in the name of the Transatlantic Company a contract, of which the following are the principal clauses: A concession of a subsidy of 9,300,000 francs per year, for twenty years, reduced, however, by 600,000 francs per year until the actual running of the Mexican line, and with a clause that the twenty years should begin only from the date that all the lines were in operation, Mr. Periere to have the following steamers: Five of 850 horse-power; six of 660 horse-power; five with a total of 875 horse-power; three, each 200 horse-power; one of 150 horse-power; one of 125 horse-power.

Mr. Mallet, in behalf of the Credit Mobilier, guaranteed the emission of 32,000 bonds, and 32,000 obligations of the said company.

The Government stipulated not to subsidize any lines between the coast of Newfoundland and the mouth of the Amazon, and that whenever a direct line to New Orleans and Havana should appear feasible, it would first negotiate with the Transatlantic Company, and in case of non-agreement would pay an indemnity, to be fixed by a commission, for damages resulting from the competition. The company bound itself to make a discount of 30 per cent. for the transport of civil, military, and ecclesiastical functionaries, for sailors and soldiers of the colonies; 7 francs per day was agreed upon for the transport and maintenance. The annual distance to be run was fixed at 157,968 marine leagues, divided thus: For the semi-monthly line from Havre to New York, 55,016 leagues; St. Nazaire to Martinique, Martinique to Santa Marta, or Cartagena, Santa Marta to Aspinwall, 78,672 leagues. For the monthly line from Martinique to Santiago de Cuba, Santiago de Cuba to Vera Cruz, Vera Cruz to Tampico, Martinique to Cayenne, 27,080 leagues. The average speed to be 11½ knots for the New York line, 10 for the Antilles and Aspinwall, and 8 for the others.

At the time of the expedition to Mexico there was established by convention of February 17, 1862, a monthly voyage from St. Nazaire to Vera Cruz, with a subvention of 310,000 francs going and returning, the company being permitted to make only a monthly voyage between Havre and Mexico, the subsidy being reduced, however, by 1,669,220 francs.

By convention of April 17, 1865, the itinerary of the lines to the Antilles was modified as follows: First line from St. Nazaire to Martinique; Martinique to Santa Marta, or Cartagena; Santa Marta to Aspinwall. Second line from St. Nazaire to St. Thomas; St. Thomas to Havana; Havana to Vera Cruz.

The following five services were established: The first from Fort de France to Santa Lucia; Santa Lucia to St. Vincent; St. Vincent to Granada; Granada to Port of Spain; Port of Spain to Demerara; Demerara to Surinam; Surinam to Cayenne. The second from Fort de France to St. Pierre; St. Pierre to Point à Pitre; Point à Pitre to Basseterre; Basseterre to St. Thomas. The third from Fort de France to St. Pierre; St. Pierre to Point à Pitre; Point à Pitre to Basseterre. The fourth from St. Thomas to Porto Rico; Porto Rico to Hayti; Hayti to Santiago de Cuba; Santiago de Cuba to Kingston. The fifth from Vera Cruz to Tampico; Tampico to Matamoros.

On account of these onerous modifications of lines the Government abandoned the penalty established by article 38 of the contract for insufficiency of speed on the New York line. A convention of March 16, 1866, established a monthly line for New Orleans, in communication at Havana with that from St. Nazaire to Mexico, and one between Fort de France (Martinique) and Porto Cabello (Venezuela), with call at La Guayra. For these two lines the Government accorded a new subvention of 131,156 francs for the first, and of 64,017 for the second.

A convention of February 16, 1868, between the French Government and the Transatlantic Company established two new lines, the first monthly from Panama to Valparaiso, and *vice versa*, with the following itinerary: From Panama to Guayaquil, Guayaquil to Payta, Payta to Lambayeque, Lambayeque to Huanchaco, Huanchaco to Callao, Callao to Chinchas, Chinchas to Islay, Islay to Arica, Arica to Iquique, Iquique to Cobija, Cobija to Caldera, Caldera to Huasco, Huasco to Coquimbo, Coquimbo to Valparaiso; the second, monthly, from St. Thomas to Colon, touching at Porto Rico, Cuba, and Jamaica.

The subsidy was 750,000 francs per year, the Government guaranteed

5 per cent. interest, authorized a capital of 60,000,000 francs, and the issuing of bonds, stipulating, however, that the maximum of interest to be paid by the Government should not exceed 2,000,000 francs, and reserving one fourth of all profits realized by the company over and above 8 per cent. The state advanced 4,000,000 francs, reimbursable without interest in fifteen yearly installments. The company bound themselves to put on three new steamers, built in France, of a speed of 12 knots per hour and 450 horse power, and to keep always at Martinique in reserve, for inter-colonial service, a steamer of at least 150 horse-power.

By convention of December 16, 1873, the subsidy was continued, the Pacific line suppressed; but in exchange 9 steamers of a miminum force of 850 horse-power and a speed of 12½ knots per hour was required, and also two additional monthly round voyages in the six months from April to November, between Havre and New York.

Mr. G. B. Beccari, in a pamphlet published at Rome in 1882, gives the following table of subventions accorded by the French Government to the General Transatlantic Company:

Point of departure and arrival.	Distance in miles going and returning.	Distance run in miles.	Division of subsidies.	Number of voyages.
			Francs.	
Havre				
New York	6,348	165,048	3,170,000	26
St. Nazaire				
Vera Cruz	11,286	189,540	3,451,156	12
Lines annexed	4,509	.....	.....	.....
St. Nazaire				
Aspinwall	9,834	162,288	3,074,017	12
Lines annexed				
	.....	516,876	9,695,173	.....

MESSAGERIES MARITIME, MEDITERRANEAN AND BLACK SEA LINES.

The convention stipulated between the Government and the Messageries Company, dated February 28, 1851, was for a term of twenty years. The annual subvention was fixed at 3,000,000 francs, and after ten years was to be diminished 100,000 francs per year. By convention of January, 1852, the subsidy was made 3,076,091 francs, and by a subsequent one of May 20, 1857, which by ministerial decree of June 2, 1864, was extended to July 22, 1888, the amount of the subsidy was raised to 4,776,118.40 francs for a yearly navigation of 188,300 marine leagues, divided into nine different lines. First line, Marseilles to Malta, touching at Genoa, Leghorn, Civita Vecchia, Naples, Messina, and Piræus, with fifty-two voyages per year, including return. Second line, Marseilles–Alexandria, touching Malta, with twenty-six round voyages. Third line, Alexandria–Smyrna, touching Jaffa, Beyrout, Tripoli, Latakea, Alexandretta, Messina, Rhodes, with twenty-six round voyages per year. Fourth line, Marseilles–Smyrna, touching Malta and Syra, with twenty-six round voyages. Fifth line, Piræus–Smyrna, touching Syra, with twenty-six round voyages. Sixth line, Smyrna–Constantinople, touching Mitylene, Dardanelles, Gallipoli, with fifty-two round voyages. Seventh line, Marseilles–Constantinople, touching Messina and Piræus, with fifty-two round voyages per year. Eighth line, Constantinople–

Braila, touching Galatz, with thirty-six voyages per annum. Ninth line, Constantinople–Trebizond, with thirty-six voyages per year.

In the contract it was stipulated that the company have at least fifteen steamers, six of 220 horse-power or over, and nine of 160. The rules for the postal service and sustenance of passengers are nearly identical with those above mentioned for the Transatlantic Company.

There is, however, a clause that in case of war the Government reserves the right to take possession of the company's material, paying 5 per cent. interest upon the approximate capital, and reimbursing the appraised losses and damages. Also, in case of suspension of a weekly voyage between Marseilles and Constantinople, the company will be bound to inaugurate a military and postal service between Algiers, Bona, and Oran, transporting gratuitously, besides letters and funds, every year 20,000 tons of material and 30,000 passengers of the fourth class, including maintenance.

MESSAGERIES MARITIME LINE OF BRAZIL–RIO DEL PLATA.

The convention of September 16, 1857, for the postal service for Brazil for a term of twenty years, went in force in 1860, was extended to 1884, and accorded a yearly subsidy of 4,700,000 francs to the messageries, with the obligation to make twice a month alternately from Bordeaux and from Marseilles the following voyages: First, from Bordeaux to Rio Janeiro, touching Gorea, Pernambuco, and Bahia. Second, from Marseilles to Rio Janeiro, touching Gorea, Pernambuco, and Bahia. Third, from Rio Janeiro to Buenos Ayres, touching Montevideo—that is, a total distance of 101,232 marine leagues. However, the line from Marseilles was suppressed by a succeeding convention of April 22, 1861, and the subsidy reduced to 2,306,172 francs, the company to have ten steamers, seven thereof to be at least of 450 horse-power, and three of 200, with an average speed of 9 knots per hour for the line to Brazil, and of 8 for the subsidiary from Brazil to La Plata. For passengers for the service, and for transports, &c., are adopted the same rules as for the other lines, with express stipulation that the contract is not to be assigned to others without the written consent of the minister of finance.

MESSAGERIES MARITIME—INDO-CHINA LINE.

April 22, 1861, there was stipulated an agreement between the French Government and the messageries, granting to the company for twenty-one years a subvention of 7,500,000 francs for the first three years; 7,000,000 for the second three; 6,000,000 for other three; 6,500,000 for other three; 5,000,000 for other six, and 5,000,000 for the last six years. The service embraces one principal monthly line, in communication with lines of the Mediterranean, and five subsidiary lines. The principal leaves Suez for Saigon, touching Aden, Point de Galles, Penang, and Singapore. Of the subsidiaries, all monthly, the first goes from Aden to the island of Reunion and Mauritius; the second from Point de Galles and Chandernagore touching Pondichery, Madras, and Calcutta; the third from Singapore to Batavia; the fourth from Saigon to Manila; the fifth from Saigon to Shanghai, touching Hong-Kong.

By convention of June 2, 1864, the line from Saigon to Manila was suppressed, and in its place was substituted another, monthly, from Shanghai to Yokohama, and the line from Mauritius to Aden was extended to Suez, with an increase of subsidy to the first of 341,301 francs yearly, and to the second of 256,631 francs yearly. The total yearly distance to be run was fixed at 112,194 marine leagues.

By a convention of April 6, 1868, the company engaged to prolong the Suez line to Hong-Kong; to take Hong-Kong instead of Saigon as the point of departure for the subsidiary line to Shanghai; to establish a direct line from Hong-Kong to Yokohama, suppressing that from Shanghai to Yokohama; to make twenty-six voyages instead of twelve on the principal line between Suez, Hong-Kong, Yokohama, and that of Hong-Kong, Shanghai; to increase by one voyage per year on the subsidiary lines. For this increase of about 90,812 marine leagues in distance there was conceded an average subvention of 37.50 francs for every league, and per year 3,405,450 francs, payable monthly.

MESSAGERIES MARITIMES—AUSTRALIAN LINE.

A convention made June 25, 1881, which went into effect in October, 1882, stipulated for a subvention of 3,297,216 francs per year for fifteen years, for a yearly distance to be run of 103,038, or 32 francs per league. The conditions imposed on the company are not yet made public except that a speed of over 11 knots per hour is established. The account current of the Messageries Maritimes Company for the years 1879 and 1880 presents the following results:

Description.	1879.	1880.
	Francs.	*Francs.*
Income received for passengers, freight, &c	31, 603, 566. 00	32, 951, 719. 00
By Government subvention	14, 057, 392. 00	14, 097, 396. 00
Total	45, 660, 958. 00	47, 049, 115. 00
Expenses of every kind, including interest on bonds	41, 144, 354. 83	42, 522, 048. 83
Profits	4, 516, 604. 17	4, 527, 066. 17

The company had in 1880 fifty-six steamers with a total of 24,270 horse-power, and for the greater part of great capacity. The distances run in that year make a total of 1,781,058 miles, of which the obligatory postal service was 1,401,549⅛ miles; optional service, not periodical, 325,149⅜ miles; for service of particular urgency 54,359 miles.

It should be observed that under the law of January 30, 1881, granting premiums for construction and navigation, all the steamship companies having postal subventions are excluded from benefits.

In the budget of the minister of finance at this moment under discussion in the French Chambers the subventions figure as follows:

	Francs.
Line between the Continent and Corsica	375, 000
Lines of the Mediterranean, Brazil, and La Plata	4, 382, 263
Lines of New York and Antilles	9, 958, 606
Indo-China line	8, 573, 024
Algiers line	880, 000
Calais and Dover line	100, 000
Total	24, 268, 892

AUSTRO-HUNGARIAN SUBSIDIES.

The postal and navigation convention which regulates the service of the Austro-Hungarian Lloyd, and the Government subsidy accorded to that steam navigation company, bears date June 26, 1878, and is for a term of ten years, commencing July 1, 1878.

The lines and speed are indicated in the annexed table:

Courses.	Number of voyages yearly.	Number of maritime leagues for each round course.
A.—Course with speed of 10 knots per hour.		
Constantinople, Varna, and return	104	290
B.—Course with speed of 9 knots.		
Trieste (Fiume), Corfu, Alexandria, and back	52	2,402
Trieste, Corfu, Syria, Constantinople, and back	52	2,356
C.—Course with speed of 8 knots.		
Trieste, Pola, Dalmatia, Durazzo, and back	52	1,037
Trieste, Pola, Dalmatia, Albania, Prevera, and back	52	1,488
Trieste, Pola, Cattaro, and back	52	825
Fiume, Lussin, Zara, Cattaro, and back	26	705
Fiume, Lussin, Zara, Cattaro, Albania, Patras, and back	26	1,369
Trieste, Fiume, and back	52	272
Fiume, Trieste, and back	52	272
Fiume, Segna, Zara, and return	52	252
Fiume, Zara, Ancona, and back	26	298
Trieste, Fiume, Corfu, Syria, Smyrna, and back	52	2,280
Trieste, Patras, Piraeus, Volo, Salonica, Constantinople, and return	26	3,306
Constantinople, Kustendje, Galatz, and back	40	858
Constantinople, Trebisond, and return	12	1,047
Constantinople, Smyrna, Cyprus, Beyrout, Port Said, Alexandria, and return	26	2,704
Alexandria, Port Said, and back	26	320
Piraeus, Syria, and back	104	156
Syria, Candia, and back	52	319
Fiume, Ancona, Bari, Messina, Candia, Lisbon, Liverpool, and back	18	6,000
Trieste, Ceylon, Calcutta, and back	6	12,260
Trieste, Aden, Bombay, Ceylon, Singapore, and return	6	13,750
Trieste, Bombay, and return	3	8,680

The indemnity is fixed by article 2 of the convention, in the following proportions:

	Florins.
For the Constantinople–Varna line	4.00
For the Trieste–Alexandria, Trieste–Constantinople, Trieste–Bombay, Fiume–Liverpool, Trieste–Calcutta	1.80
For the Singapore line	2.50
For other courses	1.50

However, it is established that the subsidy shall not exceed 2,000,000 Austrian florins.

The Lloyd steamers have these privileges:

1. Are exempt from payment of tonnage duties.
2. Can take cargoes at night.
3. Can embark health officers to abbreviate quarantine.
4. Have the right in national ports of most commodious place to load and unload.
5. Every three months are reimbursed the taxes paid in making the passage of Suez Canal.

The Lloyd Company, on their part, are bound—

1. To furnish themselves with 28,000 tons of coal per year from the Austro-Hungarian mines; always, however, that the price shall not exceed that of English coal, on the hypothesis that the heating power of national coal is to that of English as 85 to 100.

2. To accord gratuitous passage to the employés and dependants of the minister of foreign affairs.

3. The agency of the company must be filled abroad, where permitted, by postal officials furnishing security for good conduct.

4. The Lloyd steamers receive gratuitously the mails, and are subjected to fines for delays, infractions—fines which vary from 15 to 120 florins.

5. They are obliged to receive aboard the sailors, prisoners, and the indigent who are consigned to them by the imperial and royal consuls.

6. To acquire steamships from abroad the consent of the minister of foreign affairs is necessary.

7. The steamers must have an average capacity of 1,200 tons cargo, or about 850 register.

The formation of this old and powerful company dates back to 1833, but it introduced steamers only in 1836, making the service between Trieste and the ports of the Adriatic, Mediterranean, and Black Sea. Until 1865 its capital was 3,000,000 florins. On September 14, 1865, it was increased to 12,600,000, divided into 24,000 bonds of 525 florins each. In its origin the company was promoted by the city of Trieste, which guaranteed the interest upon the capital. Afterwards the Austrian Government gave it its protection. To form a clear idea of the importance of the operations of the company it will be sufficient to examine the following table, showing the service performed in 1881:

Number of voyages.	Lines.	Miles run.	Number of passengers.	Moneys received in florins.	Weight of merchandise in quintals.	Number of head of beasts.
303	Of the Levant	619, 090	94, 057	43, 795, 014	2, 102, 898	6, 514
18	Of India	262, 167	5, 868	524, 271	513, 064	673
1	Of the Red Sea	4, 115	1, 844	111, 678	6, 691	.....
241	The Danube and Black Sea	158, 394	44, 544	10, 237, 117	1, 110, 189	8, 964
152	The Archipelago	33, 649	7, 198	2, 316, 705	58, 482	6
684	The Adriatic coast	314, 750	120, 425	47, 047, 554	856, 186	912
166	Casual	218, 720	19, 632	1, 059, 486	418, 006	2, 665
1, 565	Total in 1881	1, 610, 885	293, 568	105, 091, 825	5, 065, 516	19, 735

The company's fleet was composed on the 31st of December, 1881, of 74 steamers, of a total tonnage of 88,224 and a total horse-power of 17,930. Their original cost was 68,988,125 francs, but by reason of depreciation they figure in the company's balance-sheet at 30,101,500 francs. At the above date there were in the course of construction four other steamers of heavy tonnage. The service in 1881 yielded a net profit of 5,438,870 francs.

The Lloyd's is the only company subventioned by the Imperial Government.

The Company Adria, whose principal office is at Fiume, receives from the Government of Hungary a subvention of 150,000 florins per year, under a contract made with the Hungarian minister of agriculture, industry, and commerce, January 31, 1882. Its capital is 12,000,000 of florins. The company under the contract is bound to make, from January 1, 1882, to December 31, 1891, each year, at least one hundred and fifty voyages between Fiume and the ports of Western Europe, viz: Every month two voyages from Fiume to Liverpool and Liverpool to Fiume.

Every month one voyage from Fiume to London or Hull or Leith; London, Hull, or Leith to Fiume; Fiume to Bordeaux; Fiume to Marseilles; Marseilles to Fiume; Fiume to Glasgow, and Glasgow to Fiume.

The company binds itself to maintain regular communications with Havre, Rouen, with the Irish ports, and such other ports of Western Europe as shall be designated by the minister, provided they are assured at least half a cargo at current rate of freights for steamers in the Adriatic. Such voyages will be made independently of the one hundred and fifty above mentioned. However, the company is not bound to make more than two hundred voyages per year. Nevertheless the company can be compelled by the minister to make additional voyages for the ports of Western Europe, provided they are assured half a cargo at current freights and with a subvention supplementary of 600 florins per voyage. The company's steamers must have an average of 800 tons register; the freights from and to Fiume must not be higher than those of the company from and to other North Adriatic ports. A fine of 500 florins is established for every delay in departure or arrival not justified. They are to receive and transport at their own expense sailors from the maritime academy of Fiume, but not more than two on any one steamer. The company are to have for the service of 1882 five steamers, with a total of 4,000 tonnage, and are to add a new one each year, of 800 tons, until they own twelve. The Hungarian Government is to give preference to the Adria Company for such new voyages to the west as it may see fit to establish, as well during the present convention as after its expiration.

SPANISH SUBSIDIES.

For postal subventions they have in Spain the auction system. There are several contracts of different dates, which, on an average, run eight years. The first is for the steam service between Cadiz, Santa Cruz of Teneriffe, and Palmas of the Great Canaries. The subsidy cannot be more than 248,840 francs per year. The voyage going must be done within sixty-eight hours; returning, within seventy-four. The average speed must be from 11 to 11½ knots, and tonnage from 700 to 1,200. For every delay not justified the fine is fixed at 250 francs for every six hours. The number of steamers must be three, and the voyage going and coming is every two months. The second is for the transport of the mails between Tarifa and Tangiers, runs four years, and grants an annual subsidy of 7,080 francs. The third is for the service between Barcelona and Palma, between Valencia and Palma, and between Alicante and Palma, touching at Iviza; that is, three round voyages; steamers to be 150 horse-power; the company to have at least four steamers. The subsidy is 97,425 francs per year; the contract runs six years from August 10, 1872, to be thereafter extended. The fourth is for the weekly mail service between Barcelona and Mahon, and from Palma to Mahon, and *vice versa*. The subsidy is fixed at 56,000 francs per year. The passage from Mahon to Palma must be made in twenty hours, and that from Palma to Mahon in thirteen. The contract runs eight years from the end of April, 1879. The fifth runs ten years from November 1, 1881, and accords a monthly subsidy of 45,000 francs for the following lines: Havana and Porto Rico, touching Nuriitas, Gibare, Baracoa and Porto Plata, Mayaguez, Pome, Porto Principe, and Santiago de Cuba; Havana and Vera Cruz, touching Progresso; Havana and Colon, departing from Santiago de Cuba, and touching Kingston and Barranquilla; Havana and Laguayra. The first line has three depart-

ares per month, the others are only monthly. The ships must be at least 150 tonnage. There are heavy fines and severe rules, as well for the postal service as for the transport of passengers. The sixth is for the mail service between Spain and the Antilles, and calls for three monthly departures, two from Cadiz and one from Santander for Havana, and *vice versa*. The ships must be 2,000 tons register each, and number twelve. Speed required is 11 miles per hour, and the voyage, going, to be eighteen days; returning, seventeen days. The seventh, of the 19th August, 1879, is for the service between Spain and Manila; runs ten years, and with a subsidy which cannot exceed 100,000 francs for every round voyage. The voyages must be completed in forty days in good seasons, and in forty-three in bad. The itinerary calls for 8,139 miles. The departure is monthly, and is from Cadiz and from Manila, touching Carthagena, Barcelona, Porto Said, Suez, Aden, Pont de Galle, Singapore. It calls for six steamers, and speed 11 knots. Heavy security and severe fines are established for the exact performance of the contract.

BRITISH SUBSIDIES.

The postal and transport services, of which table follows, are performed by several companies. The principal ones are: The Royal Mail Steam Packet Company, which makes the service of Brazil, of La Plata, from Southampton, and that from St. Thomas to Porto Rico. The Pacific Steam Navigation Company, running between Liverpool, Brazil, Plata, Chili, and Peru, and from Panama to Valparaiso. The Union Steamship Company, limited, which makes the service for the Cape of Good Hope and Zanzibar, leaving and returning to Plymouth, touching every month the islands of Ascension and St. Helena, completing the voyage in thirty-eight days. The British India Steam Navigation Company, running between Aden and Zanzibar. The West India and Pacific Steamship Company, limited, and the steamships of Bernard Hall and Arthur Bower Farwood, which make the service from Liverpool to Laguayra in twenty-four days; from Liverpool to Vera Cruz in thirty-four, stopping at Porto Principe; and from Liverpool to Santa Marta in twenty-eight. The Cunard Company, which performs the service from London and Halifax and the island of St. Thomas, and that from Liverpool to New York and Boston. The Liverpool, Brazil and River Plata Steam Company, running between Liverpool, Brazil, and the Rio de la Plata. The steamships of William Inman make the service between Liverpool and New York via Queenstown. The Southeastern Railroad Company and the London, Chatham and Dover Railroad Company run steamers between Dover and Calais.

The principal clauses in the contracts with these companies are, that any differences are to be arbitrated; to have steamships of determinate dimensions and speed; not to assign the concessions to others, and to pay fines in case of delays. The subsidy is not based on the distances run, but on the greater or less service rendered by the company to the English postal department, and is fixed by private contract.

Service of English postal packets, and sums paid for the postal service for the year ending March 31, 1882.

	Pounds sterling.
United Kingdom	109,577
Europe	16,000
America	190,769
Africa	14,800
Asia	360,000
Cyprus	9,000

EXPENSES OF ESTABLISHMENTS.

	Pounds sterling.
Salaries, wages	832
Travelers	65
Rents	30
Expenses of ports and docks	2,500
Casual expenses	70
Pensions	133
Total	707,767
Sums paid by the Governments of India and Belgium	90,500
Total of subventions paid by the English Government	617,267

DETAILS.

United Kingdom, Holyhead, and Kingstown	85,000
Aberdeen and Lerwick	2,200
Scrabster and Stromness	2,000
Southampton and Channel Island	6,500
Liverpool and Isle of Man	4,500
Penaznce and Scilly	450
Southampton and Cowes	150
Portsmouth and Ryde	800
Dunvegan and Lochmaddy	420
Oban and Fort William and Tobermory, Strome Ferry, Portree, &c	290
Kerbivall and North Orkney Islands	120
Stremway and Ullapool	1,300
Androsan and Arran	350
Greenock, Port Ellen, and Portaaking Islay	800
Greenock, Rothesay, and Ardrishing	1,800
Tobermory, Coll, and Eyree	95
Oban and Auchnacraig	125
Oban and Fort William	600
Oban and Tobermory	500
Weymouth and Channel Island	50
Shetland and Fair Islands	137
Shetland and Foula	80
Greenock and Lochgalhead	100
Inverness and Fort Augustus	210
Allowance for additional service	100
Total	109,577

EUROPE.

Dover and Calais (contract March 25, 1878)	8,800
Excess of premium over penalty	2,700
	11,500
Dover and Ostend (payment by Belgium)	4,500
Total	16,000

AMERICA.

United Kingdom and United States	71,000
Halifax, Bermuda, and Jamaica	17,500
England and West Indies	81,700
Twil's Island and St. Thomas	300
Belize and New Orleans	1,760
Liverpool and Callao	6,200
Liverpool and Porto Cabello, Tampico and S. Marta	1,200
Southampton, Brazil, and La Plata	5,700
Panama and Valparaiso	5,500
Total	190,860
Deduction of amount of penalty	100
Total	190,760

AFRICA.

	Pounds sterling.
West coast of Africa and England	8,000
East coast of Africa, Aden and Zanzibar, Table Bay and Zanzibar	10,000
Total	18,000

ASIA.

East India and China, between Brindisi and Bombay (via Suez), touching Aden, between Brindisi and Shanghai (via Suez), touching Aden, Pont de Galle and Colombo Penang, Singapore, Hong-Kong	360,000

CYPRUS.

Larnaca and Alexandria	9,000

THE PENINSULAR AND ORIENTAL COMPANY.

In 1837 the English Government, for political and commercial reasons, began a postal service between the United Kingdom and India, which was performed for the most part by sailing vessels of the navy. This method proving expensive and unsatisfactory was given up, the admiralty, on the 22d of August, 1837, contracted with Captain Bowme, agent of a company which afterwards took the name "Peninsular and Oriental," for a weekly service between Falmouth and Gibraltar, touching Vigo, Oporto, Lisbon, and Cadiz, and accorded a subsidy of 29,000 pounds sterling per year. In 1840 the line was extended to Malta and Alexandria, with an increase in the subsidy to 32,000 pounds sterling. the company binding itself to put on steamers of from 1,400 to 1,600 tonnage, with 400 to 450 horse-power, and so constructed as to carry heavy artillery for war purposes, the departures to be monthly and the passage to be made in fifteen days. This company having been reenforced by a number of heavy capitalists, on September 24, 1842, entered into a contract for a service between England and India, and in that month the first steamer of this line left Southampton for Calcutta, followed soon by the Bentick and Precursor, each of 1,800 tons and 250 horse-power. The forty-first yearly balance-sheet of the company, being for the year 1881, shows that the company's fleet is composed of fifty-one steamships, comprising six in course of construction. Their total capacity is 162,312 tons, with total of 28,000 horse-power. There are also eighteen small boats with 1,257 tonnage, making the subsidiary service between ports. The yearly distance run on all the lines exceeds 2,000,000 of miles, which is not so surprising when it is considered that the distance run from London to Yokohama is 11,395 miles, and that between London and Sydney is 12,126 miles.

THE ROYAL MAIL.

In 1839 Mr. Irving, in his own name and in that of several merchants and bankers of London, proposed to the English Government the formation of a maritime company for the transportation of the mails, passengers, and merchandise to the Antilles and Central America, using large steamers of 400 horse-power, and that there should be accorded an annual subvention of 240,000 pounds sterling. This proposition was accepted by convention of September 26, 1839, by which it was stipulated that there should be in the line fourteen steamers, each of 400 horse-power, and that the yearly distance run should not be less than 700,000

miles. The company not finding itself able to operate on so large a scale, the Government reduced its demand to ten steamers and to 395,000 miles of distance, but left intact the subvention of 240,000 pounds sterling. The line was in full operation in 1840. The steamers were wooden side-wheelers, making less than 8 knots per hour, and the service was so unsatisfactory that many claims were made against the company for delays. Up to 1848, by reason of the loss of some of their best steamers, the average return was about 3¼ per cent. After that year things went better, and in August, 1850, the admiralty signed a new contract with the company, by which the line was extended to Brazil, which extension was in operation by January 1, 1851. This new contract increased the subvention to 270,000 pounds sterling, and required that there should be fifteen steamers in the service, capable of carrying heavy cannon; ten of 400 horse-power, four others of 250 horse-power, and a small one of 60. In case of war the Government reserved the right to acquire and use the steamers of the company, at a price to be fixed by arbitration, and required £50,000 security for the performance of the contract.

In 1852 the capital, which in the beginning was £890,000 sterling, was increased to £1,423,460 sterling.

The old conventions having expired December 31, 1856, new ones were stipulated with the admiralty, but with a diminished subvention. The twelve years from 1854 to end of 1865 gave the following results:

	Pounds sterling.
Average yearly receipts	822,224
Average yearly expenses	672,892
Net profits	149,332

If, therefore, the company had not received the Government subvention during the said twelve years it would have lost money.

The company's fleet counted on April 14, 1882, twenty five steamers, having a total tonnage of 62,843, and a total horse-power of 10,280. The balance sheet for 1881 gave the following results:

	Pounds sterling.
Received:	
Government subvention	97,135
For transport of merchandise, passengers, and money	693,169
Total	790,304
Expended	753,811
Net profit	36,493

The loss of the steamer Tiber and the reduction of the Government subvention to about one-half what it was in 1865 (it was £209,000 in that year), contributed to depress in an exceptional manner the company's profits in 1881.

It is unnecessary to give the details of subsidies paid the Cunard and other companies.

BELGIAN SUBSIDIES.

There are at present two lines subventioned by the Belgian government, as follows:

1. The line of steamers between Antwerp and New York having an obligatory weekly service in both directions and between Antwerp and Philadelphia with a tri-weekly departure from each place. This is the Red Star Line, which is guaranteed 500,000 francs per year for the postal service.

2. The line between Antwerp and La Plata, and Antwerp and Rio Janeiro. This is operated by the Sud Americaine Compagnie, and makes three voyages per month each way, for which the Government guarantees the sum of 500,000 francs per year. The Government does not accord bounties by the course calculated on the number of leagues run: it guarantees only a minimum of return for the postal service. On the other hand, the lines in question have and must have a postal character before everything else. It is not simply an accessory, and the postal service must not suffer in any way by commercial traffic or passenger transportation. The duration of the subventions is fifteen years; both parties reserve the right to dissolve the contract from the end of the ninth year. The Government exacts as follows: First, the Belgian flag; second, such number of steamers of the first class as will enable the company to make the service without interruption; third, a minimum tonnage of 2,700 tons; fourth, different classes for passengers; fifth, prompt departures; sixth, a prescribed speed, and heavy fines for each delay.

The above contracts were made in 1873 and 1876, and were slightly modified in 1882.

DUTCH SUBSIDIES.

The lines subventioned by the Government of the Netherlands are:

1. The line from Flessinga to Queensborough, under the direction of the Zeeland Company.
2. The line from Amsterdam to Batavia, under the direction of the Netherland Company.
3. The different lines in the Indian Archipelago.
4. The line from the Island of Java to China, under the direction of the India-Netherland Steamship Company.

The total sum of the subventions is 705,000 florins; that is, for the first three lines for every mile 1.93 florins, 0.33 florin, 3.90 florins. The subvention of the fourth line is 10,000 florins per voyage; this service is once in three months, and will be monthly, which will make the total subvention 785,000 florins.

All the aforesaid lines are postal and commercial. The subvention to the Flessinga-Queensborough line and the Amsterdam Batavia line is accorded exclusively for the transport of letters, &c., of the postal department, while the subvention accorded to the Java-China line and to that of the Indian Archipelago has a commercial scope.

The contract for the Flessinga and Queensborough line was made for ten years from May 15, 1878, and that for the Amsterdam and Batavia line for an indeterminate time, commencing 1877. The contract for the line in the Indian Archipelago is for fifteen years from January 1, 1876, while that for the Java-China line dates from 1880. From what precedes it results that in the Netherland colonies the companies are subventioned for a commercial as well as postal purpose, while in Holland itself the subvention is strictly postal. The subventions are accorded by private contract.

SWEDISH AND NORWEGIAN SUBSIDIES.

The Italian minister at Stockholm, in transmitting the following list, remarks that for the postal service made by steamers between the different Swedish ports there is conceded an indemnity, which varies according to the importance of the lines, and which, for the most part, represents but an insignificant part of the expenses of navigation. Only the

Malmo-Stralsund line is subsidized on a large scale. Under a convention concluded between Germany and Sweden February 24, 1869, the Swedish Government assumed the obligation to pay to the German postal administration, for a regular steamship service between the said two ports, half of the expenses of navigation and a yearly sum of 2,000 thalers for repairs to steamers in the service.

Table of subventions accorded by the state to private navigation of steamers for the service between different Norwegian ports.

	Crowns.
Fjordene to Stavanger:	
For passage on Fjordene to Ryfylke	12,000
For passage on Högsfjord	1,000
Söndre Bergenhus:	
To steamer Karmsund for passage on exterior side between Bergen and Hangesund	3,000
For passage, Bergen-Maafjord	2,400
To the North Bergenhus:	
Steamship, for passage upon Fjordene to North Bergenhus	35,000
To steamer Molde, for passage on Fjordene to Romsdals	6,500
For maintenance of steamer between Trondhjem-Hitteren and Froyen	7,000
Upon Fjordene to North Trondhjines:	
For passage on Anasenfjord	800
For passage to the interior, Foldenfjord	4,000
Upon Fjordene to Nordlands:	
To steamer Porghatten, for passage to Bindalen, Vego, and Velfjorden	12,000
To steamer Hegelands, for passage to Vessen and Ranenfjord	16,000
To Hegeland Steamship Company, for passage on Fjordene to Saltens Fodgeri	14,000
To the Tromso Amts Company, for passage on Fjordene to Tromso	58,000
On Fjordene to Finnmarkins:	
For passage to Altenfjord	23,000
For passage to Vestfinmarkske Fiskvoer	10,000
To the Rederie, for steamer Varanger, for passage to Varangerfjord	25,100
To the Bergenske and Nordenfjilske Company:	
On the line Bergen-Throndhjem, Hammerfest-Vadso	110,000
On line Sofoten–Vesterallen-Ofote, with two boats in fishing time and one at other times	57,000
For passage to Otterens Vasdrag	1,600
To steamer Telegraph to Selbosoen	1,000
Indemnities to persons employed for the Department of the Marine and Postos, to supervise the steamers subventioned and for sending of telegrams	8,000

Table of appropriations figuring in the Norwegian budget for the year 1881–1882, *for subsidies to steamers performing the postal service on the following lines:*

	Crowns.
Frederickshald, Stromstadt	150
Frederickstadt, Hoaloerne	400
Christiania, Bundifjord	50
Christiania, Christianssand	22,000
Christiania, Bergen	37,760
Christiania, Christianssand, Bergen, Throndhjem, Tromso	100,000
Christiania, Kjobenhvn	780
Christiania, Hamburg	2,600
Drammen, Mass	1,440
Horten, Holmestrand	70
Skein, Langesund	1,440
Porsgrund, Bolvig-Herre	70
Tredestrand, Boroen	2,300
Christianssand, Frederikshavn, and Frederkshavn, Christianssand, Bergen	71,800
Christianssand, Mandal, Svinor, Spangereid	180
Stavanger, Bergen	6,656
Stavanger, Hardanger	2,500
Stavanger, Hoitingso	3,328
Skudesnoeshavn, Renneso, Stavanger, Hogsfjord	520
On Ryfylske Fjorde	3,200
Bergen, Hangesand, and Ohlandsvaag	900

	Crowns.
Bergen, Hardanger	4,800
Bergen, Fjorddestriklerne, in Sondherland	4,000
Bergen, Hans, Hammer, Hosanger, Salhus	800
Bergen, Bolstadoren	600
Bergen, Logn, Bergen, Sondfjord and Bergen, Nordfjord	26,160
Lerdal, Lyster and Lerdal, Gudvanger	10,000
On Sön and Nordfjord	2,400
Bergen, Manger, Bovaayen, Ostheim Masfjord	
Bergen, Lygren, Lindaos, Leim	1,600
Bergen, Fane, Os, Strandvik, Fuse, Haalandsdal, Sammanger	2,400
Upon Sondmore, Romdalske, Fjorde	1,300
Upon Fjirdene in Romdals Fodgeri	1,500
Upon Fjordene in Nordmore Fodgeri	13,000
Throndhjem, Hamburg	22,000
Throndhjem, Christiansund	8,820
Throndhjem, Indherred	4,000
Throndhjem, Hitteren, Froyen	2,000
Throndhjem, Orkedal	230
Bergen, Throndhjem, Vadso	150,000
On Vefsen and Ranenfjordene	2,000
On Saltenske-Fjorde, and on Foldenfjorden	4,000
Brono, Bindalen, Fiskerosen, Vigo, Velfjorden	2,000
Lofoten, Vesteraalen, Ofoten	20,000
On Tromso, Amts Fjorde	7,000
On Altenfjord	2,560
On Varangefjord	900
On Mjosen	15,000
On Ojeren	150
On Kroderen	1,200
On Spirillen	200
On Randsfjorden	1,200
On Pinsjoen	180
On Nordsjovandet	1,100
On Flaa, Havideseid, and Bandalsvandene	480
To divers steamships, to transport the mails to foreign countries	2,236
Total	586,000

ITALIAN SUBSIDIES.

The Italian steamship companies Florio and Rubattino were consolidated by the terms of a convention with the Government dated June 15, 1877, and together receive from the Government an annual subvention of 8,139,576 francs, or an average of 16.84 francs per league, the total of leagues run being 483,252. The tariff establishes from 0.93 franc to 0.66 franc for passengers of the first class, from 0.62 franc to 0.44 franc for passengers of the second class, and from 0.31 to 0.22 for those of the third class for each league, exclusive of food. For merchandise, according to category and according to distance, freights vary from 1.50 to 10 francs per quintal. The speed varies, according to the line, from 8 to 10 knots per hour, and so also according to the line varies the capacity of the ships, *i. e.*, from 200 to 1,300 tonnage. The carriage of the mails is obligatory. Fines of from 50 to 100 francs for every hour of delay in starting and arriving not justified are established. The company is obliged to transport at half price civil and military employés and prisoners.

They possessed at the beginning of the present year ninety-two steamers, with a total tonnage of 128,330. They have in course of construction the following steamships: The China, of 5,000 tons, the Japan, of 5,000 tons, and the Java, of 3,600 tons, in English ship-yards; and the Birmania, of 3,200 tons, in Orlando's yard, at Leghorn.

The subvention applies to the following lines of this company:

1.—THE SARDINIAN AND TUSCAN ARCHIPELAGO LINE.

Lines.	Leagues per voyage.	Voyages per year.	Leagues per year.	Quota per league.	Yearly payments.
					Francs.
Leghorn, Cagliari, Tunis	318	52	16,536	18	297,648
Leghorn, Civita Vecchia, Cagliari	230	52	11,960	18	215,280
Siniscola, Orosei, Tartoli, Cagliari	260	52	13,520	18	243,360
Leghorn, Portotorres	126	52	6,552	18	117,936
Leghorn, Bastia, Maddalena, Portotorres	148	52	7,696	18	138,528
Leghorn, Civita Vecchia, Maddalena, Portotorres	198	52	10,296	18	185,328
Cagliari, Muravera, Tortoli, Orosei, Siniscola, Terranova, Maddalena, Santa Teresa, Portotorres	162	52	8,424	18	151,632
Cagliari, Naples	178	52	9,256	18	161,608
Cagliari, Palermo	146	52	7,592	18	136,656
Leghorn, Gorgona, Capraia, Marciana, Portoferraio, Rio Marina, Portolongone, Pianosa, Giglio, Santa Stefano	104	52	5,408	18	97,344
Leghorn, Portoferraio	30	52	1,560	18	28,080
Portoferraio, Piombino	8	365	2,920	.....	30,000
					1,808,400

2.—THE SICILY LINE.

					Francs.
Palermo, Messina	82	52	4,264	19	81,016
Taranto, Brindisi	102	52	5,304	19	100,776
Naples, Palermo	112	365	40,880	19	776,720
Naples, Messina, Reggio, Messina	132	52	6,864	19	130,416
Naples, Diamante, Belvedere, Paolo, Amantea, St. Eufemia, Pizzo, Messina, Reggio, Messina	166	52	8,632	19	164,008
Naples, Paolo, Amantea, St. Eufemia, Pizzo, Tropea, Gioia, Tauro, Messina, Reggio, Messina	162	52	8,124	19	160,056
Naples, Pisciotta, Paolo, Amantea, Pireo, Reggio, Messina	154	52	8,008	19	152,152
Naples, Messina, Reggio, Messina, Catania, Syracuse, Malta	236	52	12,792	19	243,048
Palermo, Trapani, Farignana, Marsala, Pantalleria, Tunis	154	52	8,008	19	152,152
Palermo, Cefalu, St. Stefano, Capo d' Orlando, Patti Milazzo, Messina	88	52	4,576	19	86,944
Messina, Catania, Syracuse, Malta	114	52	5,928	19	71,136
Palermo, Trapani, Marsala, Mazzara, Sciacca, Porto Empedocle, Palma, Licata, Terranova, Scoglitti, Pozallo, Syracuse	184	26	9,568	19	181,792
Messina, Lipari, Sabina	38	104	3,952	19	75,088
Palermo, Ustica	24	26	624	19	11,856
Messina, Reggio	6	730	4,380	.....	24,000
Porto Empedocle, Lampeduso	82	52	4,264	.....	17,000
					2,428,268

3.—TUNIS, EGYPT, INDIA, CHINA LINE.

					Francs.
Tunis, Susa, Monastir, Medlisa, Sfax, Gerba, Tripoli, Malta	452	52	23,504	14	329,056
Genoa, Leghorn, Naples, Messina, Catania, Alexandria	920	52	47,840	.....	300,000
Genoa, Leghorn, Naples, Messina, Catania, Port Said, Suez, Aden, Bombay	3,064	12	36,768	.....	1,080,000
Genoa, Leghorn, Naples, Messina, Catania, Port Said, Suez, Aden, Ceylon, Penang, Singapore	4,374	4	17,496	32	559,872
					2,268,928

4.—THE LEVANT LINE.

					Francs.
Venice, Ancona, Freniti, Viesti, Bari, Brindisi, Piraeus, Constantinople	830	52	43,160	21	906,360
Palermo, Messina, Catania, Piraeus	448	52	23,296	21	489,216
Piraeus, Salonica	176	26	4,576	21	96,096
Piraeus, Smyrna	140	26	3,640	21	76,440
Brindisi, Corfu	78	52	4,056	21	85,176
Ancona, Zara	56	52	3,016	21	63,336
Total					1,716,624

The Italian Government also pays 500,000 francs per year to the English Peninsular and Oriental line for a weekly postal service from Venice to Brindisi, and *vice versa*, under a contract by which that company obligates itself to transport the mails gratuitously between Italy and Egypt, and also to carry civil and military employés, who travel by reason of their respective services, and missionaries, at half the price established for other passengers, not only on the line subsidized but also on the company's other lines from Suez.

GERMAN SUBSIDIES.

The subventions paid for the lines from Hamburg to Tampico, from Kiel to Koersen, from Lubeck to Malmoe, from Rostoik-Nykjoping, and from Stralsund to Malmoe, amount to 332,500 francs per year. The lines from Bremen and Hamburg to the United States are compensated on the basis of the value of the postal service rendered.

Table of subventions accorded by various European states to international steam navigation lines.

States.	Number of companies subventioned.	Average duration of concessions.	Amount of the subventions.			Average speed required.
			Per year.	Per league.	By other criteria.	
		Years.	*Francs.*	*Francs.*		*Miles.*
Austria	1	10	*5,000,000	2.35 to 10		8 to 12
Hungary	1	10	375,000		For 150 voyages	8 to 12
England	10	1	15,430,145		According to the importance of the postal service.	9 to 13
France	2	15 to 24	32,414,457	25.90 to 45.70		9 to 13
Spain	7	8 to 10	5,000,000		According to the postal service	11 to 12½
Belgium	2	15	1,000,000		Guaranty of an average return	10 to 11
Holland	4	10 to 15	1,762,500	5 to 9.75		9 to 11
Germany	4	10	332,500		According to postal service	9 to 10
Italy	2	12	8,639,576	†12 to 32		8 to 10

* Other advantages.

† According to the line.

DUNHAM J. CRAIN,
Consul.

UNITED STATES CONSULATE,
Milan, December 5, 1882.

IRISH DISTRESS AND EMIGRATION.

REPORT BY CONSUL-GENERAL MERRITT, OF LONDON.

The reports published on both sides of the Atlantic relative to the extent and alarming character of the present distress among the Irish peasantry have been so conflicting and exaggerated that I have deemed an inquiry into the real facts of the situation would be of service to philanthropists, who too often give where charity is uncalled for and mistakenly withhold where it is needed. But aside from this consideration Irish distress means increasing emigration to the United States, and it includes many political questions into which it is not my province to enter. Wholesale emigration aided by Government is looked upon in many quarters as the only relief from the periodic recurrence of famine, and measures are now on foot to send thousands of poor families from the "congested districts" of Ireland across the Atlantic.

Considering the subject in these aspects one of legitimate inquiry, on the 28th of February last I addressed a circular letter to the members of the United States consular corps in Ireland, asking them to make investigation in their respective districts and to report on the following points:

I. Whether the published accounts of the distress were substantially correct or were exaggerated.

II. Whether the prospects of amelioration in the immediate future were encouraging.

III. To what extent will the existing conditions tend to a more rapid emigration to the United States or the English colonies.

IV. Whether the Government, the guardians of the poor, or associations are engaged in sending paupers to the United States.

I.

The reports submitted in reply to the first question, while admitting the gravity of the situation, generally agree that the distress prevailing at present is not exceptional in its character, and that the published accounts to the contrary are exaggerated. In the poorer agricultural districts the situation of the peasantry is miserable, and abject poverty is the rule, but sad as it is it has been the same for years and has become the normal condition of life. The partial failure of the potato crop in certain parts of Ireland has to some extent aggravated the situation. The fisheries have again been unsuccessful, and the rainy autumn and winter, while foreboding no good to the coming crops, have interfered with the work of the laborer. Consul Piatt, of Cork, says upon this point:

> While I am inclined to believe that the destitution and distress in Western and Southern Ireland are great enough and worthy of the assistance that our people are always disposed to give, there is certainly room to doubt whether the picture as it is shown to the outside world is not exaggerated. Boards of guardians and popular bodies, I am assured, are in a measure responsible for this exaggeration, as they, in their anxiety to have the poor-rates relieved by the opening of relief works by the Government, have made efforts to magnify the distress in some localities.

In brief it may be safely assumed that the much talked of "starvation point" has not been reached, however bad the situation may be, and that the local and Government authorities have abundant means at hand to relieve actual necessity.

II.

The prospects of amelioration of the present condition in the immediate future are most discouraging. Mr. Eccles, consular agent at Sligo, says:

The wet weather of last harvest prevented much peat fuel being saved, and the poor suffer much from want of fire in consequence. Unless employment is given, or temporary charity be distributed until the warm dry weather comes, great distress will, I believe, prevail; but the laborers and small farmers do not like to become the recipients of charity and are anxious to obtain employment to support themselves and families. There is no prospect at present of this employment being obtained, and the outlook is gloomy indeed.

It is altogether unlikely that the Government will shortly commence public works in order to give employment to the people, as the policy settled upon is relief either by the workhouse or by emigration. The chief secretary for Ireland in a recent speech said that the condition of the poorer class of farmers was more deplorable than that of any class of people living in any civilized country; that there were 67,000 farmers of from 1 to 5 acres, and 160,000 of from 5 to 15 acres; and in the latter class there were not more than from 2 to 2½ acres of arable land in their holdings. Under more favorable conditions the agricultural interests in Great Britain have suffered severely, the present price of farming land being the lowest known in generations, and the oppression of bad seasons and foreign competition has reduced the Irish farmer, whether tenant or owner, to still lower depths of poverty. Trade in Ireland is extremely dull. Land is almost unsalable at any price, and the unsettled political state of the country forbids the hope of capital being forthcoming to extend manufacturing interests. From whatever point of view the subject is looked at there is little or no chance for an improvement in the immediate future.

III.

With great unanimity the consuls agree that the present condition must act as a powerful stimulus to emigration, and many interesting facts are given in their reports to illustrate this branch of the investigation. In 1882 the emigration was 89,566, an increase of 10,847 over 1881, and the present year, at the lowest, will certainly show an emigration of over 100,000. The total numbers represented 17.2 per 1,000 of the population as it stood in 1882; 74.8 per cent. of the persons who left Ireland last year were between the ages of fifteen and thirty-five, showing that a large majority were able-bodied. Of the 47,426 males who emigrated, no less than 32,955 were returned as simple laborers. As to farmers, the figures for the past three years are: 1880, 1,994; 1881, 2,440; and 1882, 3,140.

IV.

As to the question whether the Government, the guardians of the poor, or associations are engaged in sending paupers to the United States, some diversity of opinion exists, which may be accounted for by the difference of the localities from which the consuls write. Consul Barrows, of Dublin, says that no such practice is in operation in his district. Consul Wood, of Belfast, writes:

I know of no organized effort for any large deportation of sufferers or paupers to the United States. No doubt many will find their way there by the aid of friends,

and often in a measure by charitable funds. It is to be feared that most of such emigrants are without means, and, what is worse, without skill in trades or other occupations, and with so little money as to afford no promise of any respectable support on their arrival in America.

Consul Livermore, of Londonderry, understands that "Government agents, with no great success, however, endeavor to induce the poor and lazy to emigrate." Mr. Eccles, at Sligo, after saying that the guardians of the poor have scheduled out certain districts under the emigration clauses of the land act, states that in the Sligo union alone 600 applications have been made, and in the western unions considerably more. Continuing, he says:

The bulk of these emigrants will go to the United States. They will receive £7 per head to cover cost of passage and outfit. It has been calculated that this will cost £6 each, which will leave about £1 to each on arrival. As it appears to me, the guardians of the poor are desirous to emigrate those who are likely to be in a state of chronic poverty at home and save the rates from their possible support. If these people are thrown upon the cities of the United States without provision being made beforehand for their employment, they may become burdens on the rates there also, and the country of their adoption may become a loser instead of a gainer by their influx. * * * I believe also among the families who intend to emigrate there will be infants and many children of both sexes under fourteen years; old people will try to get out by giving fictitious ages, and similarly also with those suffering from insanity, idiocy, and other infirmities.

I have thus briefly indicated the nature of the information which these consular reports contain and the general conclusions to which they tend, which I believe to be worthy of serious consideration. * * * As to relieving Irish distress by contributions of money from the United States, which have always been so liberal, the charges have been so frequent in the past that much of this money has been used for other purposes, that I suggest in the future the utmost care be taken in choosing the channels through which the charity is to be administered.

In conclusion, I desire to express my sincere thanks to the United States consular corps in Ireland for their full and prompt replies to my questions on the subject of this investigation.

E. A. MERRITT,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
London, March 21, 1883.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSUL PIATT, OF CORK.

CONSULATE OF THE UNITED STATES AT CORK,
Queenstown, March 10, 1883.

SIR: With reference to your letter of 28th February, requesting information as to the distress prevailing among the poor in this consular district, I have to report that I have found it difficult to get more than a general impression on the subject. I have written to several gentlemen who, as I thought, might be able to furnish authentic statements, and I have gone to some personal expense, without definitely satisfactory results. But I have somewhat carefully reviewed such newspaper reports of local unions as I had kept in reach, consulting also well-informed persons here, and I hope I may present a reasonably correct view of the situation.

It may be set down as a fact that there is always distressing poverty in the western and southern parts of Ireland, the rocky and mountainous seacoast region, where, remote from the larger towns, a great number of people live on very small agricultural holdings, in dwellings of the poorest and meanest kind, fit only, but hardly fit, for the brute beasts which in many cases make part of their household.

It is a life of distress, year in and year out, these people live; this may be given as the normal state of things. Of course, under the political and social conditions of the last few years, with discouragement of all kinds of enterprise throughout the country, with many evictions, and the hardships, including loss of employment, which have resulted, the normal state must have become much worse. Add to this the partial but very serious falling off in the last year's potato crop, which is the staff of life in good years of the Irish peasantry, and the value of which in Ireland was reported to be over $20,000,000 less than in 1881, and over $10,000,000 less than the average of the last ten years, certainly the chronic distress must necessarily be greatly aggravated. Such has been the case during the past winter, and such it is now at the opening of spring; and one hears from various points in the region indicated above (including portions of Kerry, Galway, Limerick, Cork, and other counties) of many people being at the point of starvation. Does this mean literally starvation? It does not always; in some cases it does, though I have been able to learn of but one or two deaths attributed to that cause. I have read of numerous cases of famine fever in the workhouses (as, for example, in a report from Swinford, in this county, three or four days ago). These should be reliable. Doubtless there are many more similar cases always outside and unreported; for the workhouse, I understand, is often shunned by the very class that it is designed to relieve. It is perhaps not an ignoble trait in the Irish poor that many of them would starve rather than accept the humiliating hospitality of the public charity establishment. Besides this resort, with the doled-out pittance of the relieving officers—for which the property holders in town and country are taxed largely, if I may judge by the so-called "poor-rates" which I myself pay on the house I occupy as my residence, amounting to nearly a quarter of its "valuation"—besides this, I say, the only present help for many of the suffering poor is from voluntary contributions.

While I am inclined to believe that the actual destitution and distress in Western and Southern Ireland are great enough, and worthy of the assistance that our people are always disposed to give, there is certainly room to doubt whether the picture, as it is shown to the world outside, is not exaggerated. Boards of guardians and other popular bodies, I am assured, are in a measure responsible for this exaggeration, as they in their anxiety to have the poor-rates relieved by the opening of relief works by the Government have made efforts to magnify the distress in some localities. Another class, however, ignore or deny the existence of such distress entirely.

I met several days ago a prominent gentleman of this place—a very intelligent, as well as genial and kind-hearted man—whose opportunities of knowing Western and Southern Ireland for some years past should have been the best, and in the course of a brief conversation I hazarded the remark that there was a great deal of distress in the coast region of the island. "Not a bit of it; don't you *believe* it," was his quiet, emphatic answer; and then he told me of his experience attending the distribution of certain supplies to the "distressed districts" in 1880.

At points where the want was reported greatest, the officers could not, unless at extravagant prices, he said, employ help even to unload the cargoes of supply, and in some cases, therefore, the naval crews had to perform the work themselves. The officers would meet, he told me, with expressions of contempt at the idea of sending the people "such stuff" as Indian corn meal, which, as I have learned by domestic experience, is considered food fit only for pigs (servant girls express their surprise that folk in America should eat and can be fond of bread made thereof). Again, has it ever been told that the mission of the Constellation to these shores, three years ago, was an enterprise of doubtful success as a charity; that the American potatoes went a begging, so to speak, for somebody to eat them; were not thought so good as Irish (nothing American, I am afraid, is thought so good here as that which is Irish); and that some of them were returned to Queenstown and exported to the United States? Such has been a story current here, and reported to me by the high authority just quoted. The visit of the Constellation was, however, a boon in some respects; if it did not relieve the poor starving Irish, there were costly dinners and balls up and down the country. The gentleman quoted above seemed to think it a pity, and expressed indignation that people of the United States, in view of the terrible Ohio Valley floods, should be called upon to minister to fictitious distress in Ireland.

I have written the foregoing paragraph to suggest a doubt of the picture of Irish distress being bad as it is painted in certain quarters, but I repeat that I feel confident there is enough dire poverty and need in the western and southern coast region—and the consular district includes several of the most afflicted localities—to excite the sympathies and insure the helping hand of those charitably disposed everywhere.

As for the prospect of amelioration of the present aggravated condition of a chronic distress, it may be presumed that the spring season, which is here already manifest, with weather favorable for plowing and planting since the latter part of February, will tend to mitigate the evil. Many out of employment will find something to do in the renewed farming operations, and liberal-minded men here and there seem to be showing a disposition to make employment for such as are willing to accept of it. Still a long period must elapse before the earth itself will offer any direct help and supply the defect of last year, and at best the situation in the more afflicted localities must remain very bad. Meanwhile it may be felt that there is some prospect of amelioration of the chronic distress of Ireland. As all classes have suffered in a greater or less degree by the late agitation, there seems now a pretty general anxiety to have a line drawn, and a better feeling, with a stronger desire for mutual help and co-operation, is fast springing up throughout the island; and in bringing this about the Land League may justly, it is thought, claim all the praise, inasmuch as that organization, with the agitation carried on under its auspices, has done more to level class distinctions in Ireland than any previous effort in that direction. Land proprietors who, previous to the establishment of the Land League, looked down upon trade and upon traders, are now (possibly owing to their reduced incomes) more inclined to foster and embark in commercial enterprises. During the prevalence of this spirit the cry of "promote home manufactures" was sent forth and so loyally taken up by all classes that all public boards now accept no goods of foreign manufacture, provided those made in Ireland are as good and as cheap, or nearly so. This has encouraged capitalists to open new manufactories, and should this patriotic feeling continue amongst the population for a sufficient time

to enable these industries to take firm root, one of the most fruitful sources of Irish distress will be done away with.

Mr. Gladstone's land act is conferring large proprietary rights upon the farmers—much larger than that class three years ago thought of asking for; the operations of the act in the matter of fixing judicial rents are, however, being but slowly carried out, and it is estimated that it will take some years before the rents of all the farmers are fixed for the statutory term of fifteen years. In connection with the benefits thus conferred on the farmers, the laborers' position is being somewhat improved, and further legislation on behalf of the laborers is promised in the near future. This will tend still further to lessen the causes of Irish distress, and the prospects of its amelioration may be regarded as hopeful. These results it will, even under most favorable circumstances, take some time to bring about, and meanwhile distress in Ireland will more or less fluctuate with good and bad harvests.

With regard to the effect of the existing state of things upon emigration from Ireland, I have been led to the conclusion, from careful inquiries on the subject, that the tide of emigration this year from the south of Ireland will be quite up to the average of late years. What proportion of the emigrants will seek the United States as the land of their adoption it would be impossible to say with certainty; but undoubtedly the United States is preferred by the Irish themselves, and thither those who emigrate with their own means and at their own discretion will go. For some time, however, the English Government has been endeavoring to direct the flow of emigrants from the United States to Canada. In furtherance of this movement the Government has this year made a firm stand against opening up public works for the relief of distress in Ireland, and it has confined the discretionary powers of poor-law boards to assisting paupers to emigrate, or relieving them by admitting them to the work-house. Out-door relief is in all cases denied where the applicants enjoy health, and where their only complaint is hunger through want of employment.

This course is adopted by the Government with a full knowledge of the fact noted above, that the Irish poor have the strongest objection to enter the work-houses, and that many of them will almost suffer starvation rather than break up their homes (miserable as they are) to seek the shelter of a work-house. The Guardians of the Poor not unnaturally complain that the Government is unduly forcing emigration, and that the refusal of the Local Government Board to allow the guardians to give temporary out-door relief, pending the arrival of spring work, has been altogether dictated by this motive. The Local Government Board have just issued a circular letter to all Boards of Guardians in Ireland on the subject of emigration, an extract from which will clearly show their feeling and object in the matter. Mr. W. D. Wordsworth, the assistant secretary of the Local Government Board, writes:

> The Local Government Board desire me to state that, in consequence of the report of one of the emigration committee, they must request the Board of Guardians not to receive the offer of any person wishing to emigrate to the United States unless he has some friend or relation in the States, and unless he produces proof that such friends or relations are able and willing to render him assistance in procuring employment, as there is not much work going on there at present. The Local Government Board strongly recommend Canada to emigrants, and free grants are offered to approved families by the Canadian Government, who have also made arrangements for the giving of employment to all emigrants landing in the Canadian territory.

While this letter conveys pretty clearly the intentions of the English Government on the subject, the subjoined discussion, which followed the reading of the communication at the Tralee (County of Kerry) Board

of Guardians last Wednesday, March 7, as clearly indicates the feeling of the people of Ireland:

Mr. John Kelly said there was a report circulated some time since that the Government proposed the people should not be sent to Canada, but that report was contradicted by the Local Government inspector, who did not want to have them sent to the United States. It was now quite clear they were wanted for Canada.

Mr. M. QUINLAN. I saw a family sent back from Canada destitute. They could not get employment there.

Mr. KELLY. This is simply repeating the business of 1847 and 1848.

The CHAIRMAN (Lieutenant-Colonel Rowan). They do not wish to send away any one who does not wish to go.

Mr. KELLY. It is not their wish, but ours, that must be considered.

Mr. KENNY. Those who are going are being deluded into doing so.

Mr. KELLY. Irish emigrants would be more at home in the United States, where Irishmen are making the laws, than they would be on the frozen plains of Canada. [Hear, hear.]

Mr. MCCOWEN. I think a very fair reason is given for wishing to send them to Canada—that of there being no employment for them in the States.

Mr. KELLY. They would be able to make out a living some way there, but the Government want to send the people to a country in which the grizzly bears can hardly live [laughter], and to let them go into the work-houses there.

I inclose an extract from the Cork Examiner, showing the reception, on the same day (March 7), by the Board of Guardians at Killarney, of the same expression from the Local Government Board; also another extract from the same paper, of last Thursday, referring to a case of Government assistance to a large party of girls, some of whom had been paupers, about to emigrate to the United States, having been engaged to work in a cotton factory in New England.

I am, sir, your obedient servant,

JOHN J. PIATT,
Consul.

General E. A. MERRITT,
Consul-General of the United States, London.

Inclosures in Consul Piatt's report.

[From the Cork Examiner.]

KILLARNEY BOARD OF GUARDIANS.

KILLARNEY, *Wednesday.*

Present, Messrs. Sheehan, Warren, and Price.

A letter was read from the Local Government Board, stating that, in consequence of the report of the emigration commissioners, *Major Gaskill requests that assisted passages to America should not be forwarded unless the applicants could prove they had friends in the States willing to receive and able to assist them on their arrival. Canada was strongly recommended as a suitable country for intending emigrants.*

Another letter was received from the Board with reference to a resolution passed at the last meeting of the guardians, asking upon whose representation the Killarney electoral division was scheduled under the 20th section of the arrears act. The Board desired to state, in reply, that it was done on the representation of a committee who were desirous to undertake the emigration of poor persons resident therein.

Mr. Sheehan complained of the indirectness of the answer. He said that the Local Government Board by a secret treaty, made behind our backs with men opposed to all the interests of the country, caused this union to be scheduled for emigration purposes. We resisted it on many grounds, and if the Board don't think us worthy of confidence, let the Government appoint a properly appointed instituted committee, and if they are willing to advance £5 per head, we will offer a like sum to settle people down in waste lands or idle farms. I was thunderstruck to find the union had been scheduled, but we must find out the names of this committee and throw the onus of this emigration business entirely upon them, as they have undertaken it.

A resolution was passed again asking the Local Government Board for the names of the committee on whose recommendation the Killarney electoral division was scheduled for emigration purposes.

LIMERICK UNION.

The ordinary weekly meeting of the guardians of the Limerick Union was held to-day, Mr. William Abraham in the chair.

State of the house on Saturday, 3d day of March, 1883: Total sick and healthy, 1,796.

Dr. Russell read a communication from the Local Government Board, dated the 6th of March, 1883, acknowledging the receipt of the guardians' resolution requesting their sanction to an outlay of £70 to assist sixty-five females to America, and as the guardians appeared to have been cautious in their selection the board have no objections to the outlay of the proposed sum, the guardians being satisfied of the responsibility and respectability of the American establishment where they are to be employed.

The chairman announced that a letter had been received from the Local Government on the subject of the emigration of young women to America, and suggested the advisability of taking it up first, as being the most important subject recorded for their consideration that day.

The chairman's suggestion was agreed to.

Dr. KANE. I would like to know who is to take charge of these girls on the way over to America; and also I wish to know when they arrive there into whose moral care are these young women to be intrusted?

Alderman MYLES. There is no occasion for any one going with them; there are two ladies to take charge of them.

Mr. GAFFNEY. They belong to a charitable association?

Dr. O'SHAUGHNESSY. Yes.

CHAIRMAN. A good many of those who had been investigated by the committee last Tuesday were occasionally in and out of the house.

Alderman MYLES. The master had twenty names of the girls in the house anxious to go out.

* * * * * * *

Dr. O'Shaughnessy rose and said: I am glad to be afforded an opportunity of explaining the grounds on which the advocates of this small grant seek it. Firstly, because it has reached me that some ratepayers have expressed disapproval of such a grant; and again, as I have read in one of our local papers a strong article disapproving of the proposed action of the Board in this case. The young girls who are about to leave this city have been, on three several occasions, brought before some members of your committee, and their condition, character, and antecedents carefully inquired into by your officers. Those girls number altogether sixty-five, and as a matter of fact were found to be totally destitute, many of them without father or mother; others the children of fathers sick in your hospital, and others reared in this house, and, as will be seen by your book, re-entering it from time to time. In nearly every instance the relieving officers satisfied the committee that those girls were good and moral characters. Whenever a question arose on this point the committee refused a grant. The agent of the American company, Major Crowley, distinctly stated that so far from seeking skilled hands, factory girls, or trained servants, he preferred young girls, untrained and unskilled in either department, as they would likely be more easily taught a new branch of trade, such as is carried on in the cotton factory in Nashua, near Boston, where those great factories are in operation. For the further information of the public and the ratepayers it may be well to say that the passages from Galway to America will be paid by the American firm, and that the only cost proposed to be incurred by us will be the fare to Galway and the releasing of some clothes pawned by those poor girls from time to time, the average sum amounting to between 17*s.* and 18*s.* per head. I may also add that (in addition to the sixty-five names before me) over a hundred girls will leave your city on to-morrow, without any cost to the ratepayers, under the charge of this gentleman and female friends, and many of those are enabled to leave by the charity of many private individuals in the city, or at least from the funds of charitable institutions subscribed to by them; so that neither from the ratepayers' consolidated fund nor any other fund connected with this country will any money be abstracted beyond this £65 to take over two hundred girls out of wretched poverty, and perhaps worse.

Mr. GAFFNEY. I am not going to say anything against the sufficiency of the credentials of Major Crowley, but I may ask to whose patronage are we indebted for Major Crowley's visit to Limerick?

Dr. O'SHAUGHNESSY. I am in a position to answer that question. The fact is that the Roman Catholic clergyman in whose parish this cotton factory is situated, and

who has recommended the respectability and faithfulness of the institution, is a Limerick man. I refer to the Rev. Mr. Holohan.

Mr. GAFFNEY. Now I understand it.

Mr. Hastings suggested not to waste time over a desultory discussion, but proceed to grant the money.

Alderman MYLES. Then I formally propose that the list of seventy girls submitted be sent to the Local Government Board, with the view to granting money.

Mr. M'NAMARA. I second that.

The proposition was carried.

[Extract from letter from clerk of Cork Union to Consul Platt.]

The pressure of distress among the poor and laboring classes in the Cork Union is not, as far as my observation leads me to believe, greater nor so severe as during the three past winters. There is no abnormal demand for relief, although the numbers on the relief lists are higher than they were five or six years ago. This I attribute rather to a want of employment than to actual dearth or scarcity of food. The published statements as to the extreme misery prevailing in the western and northern parts of Ireland may be true, but they do not apply to any portion of the Cork Union, I believe. The immediate future is encouraging, as the land agitation is settling down and the farming classes are being placed in a satisfactory position as to the rent and tenure of their holdings. They will henceforward feel themselves secure, and become enterprising and industrious accordingly. There is no prospect of an extensive emigration from this union, as far as I can hear and observe. Isolated cases of individuals or family groups will leave from time to time, as better prospects across the Atlantic present themselves, but there is no likelihood of a movement on a large scale. Indeed the feeling of our Board is quite against emigration, as they consider the country is by no means overpopulated, and that with the return of better times in the immediate future the circumstances of the dependent classes will improve and the pressure on the public resources be greatly lightened.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSUL WOOD, OF BELFAST.

UNITED STATES CONSULATE,
5 *Donegal Square South, Belfast, Ireland, March* 16, 1883.

SIR: I have had the honor to receive your communication of the 28th ultimo, requesting a report upon the subject of the distress now prevailing among the poor within this consular district, and submitting the special topics to be embraced in the inquiries to be made in this respect.

It may be said generally, in response to the request, that no exceptional distress appears to exist or is reported as existing among the people of this district. The published accounts of the failure of the crops (of potatoes chiefly) and the consequent suffering and destitution, so far as they concern the north of Ireland, relate in most part, and in fact almost wholly, to the county of Donegal and within the district of the consul at Londonderry. There is reason to believe that much of the matter appearing in the newspapers here in respect of the distress prevailing in that district has its foundation in very grave facts. The daily journals of this town make repeated reference to the extent of distress, and describe it as having reached the point of starvation in some instances and to extreme destitution in many others. Subscription lists appear daily, with reports of donations, and supported by the urgent appeals of clergymen of all creeds and of reputable persons in that quarter. The responses to these appeals appear ready and generous, and are characteristic of the sympathy with distress which I have more than

once had occasion to observe of the people of Belfast. It is to be said, however, that very few details of the exact extent and degree of destitution have come under my notice. The reports assume a wide region where distress prevails, but I have seen scant statistics; and while these reports are of such a character and so well authenticated that no reasonable doubt remains, yet it would be more satisfactory, especially in view of certain traits of the Irish character, if they were supported by a greater detail of statement.

The efforts for relief take the direction, for the most part, of supplying potatoes for seed for the coming crop and to meet the destitution now existing and likely to continue into July next, when the new crop will be available. In the district of this consulate the crop of potatoes was not a good one, yet the loss was not so great as to give rise to alarm or distress. Other crops also were short, as a consequence of excessive rains and ruinous storms. But in addition to the general failure of the potato crop in Donegal it is stated that other crops were much below the average. In any season—even the most prosperous—but little of food is produced there beyond the demands of consumption, and as there are few employés of labor by which wages can be earned, and few resources of any kind outside of some small and unimportant fisheries, the result is the suffering now experienced. No likelihood suggests itself of an early amelioration of the condition of the people in that region from any increased production of the soil or from the development and enlargement of the industries that have made this section of the province of Ulster so prosperous. A crop failure, especially in potatoes, repeats the present distress, and will, so far as I can see, continue to do so until many and radical changes take place, both in the habits of the people and their means of living.

At such periods the subject of relief by emigration is discussed with more than usual interest. It would appear that some of the funds already raised have been devoted to assisting emigration. I have, however, observed no systematic effort to this end by the guardians of the poor, or charitable or other associations, although I have been watchful in this direction. From time to time articles and letters appear urging emigration as the sole speedy relief; but as yet I have seen no statement showing an organized effort by officials for any large deportation of the sufferers or paupers to the United States or elsewhere. No doubt many will find their way to the United States, helped thereto by friends and often in a measure by charitable funds. The departures from Belfast and Larne suggest this. It is to be feared that most of such emigrants are without means, and, what is worse, without skill in trades or other occupations, and with so little money as to afford no promise of any respectable support on their arrival in America.

In this connection I observe in the London Times of the 12th instant a letter from the Duchess of Marlborough, in which she tenders to the committee of which the Duke of Bedford is president the sum of £3,600, remaining over from the fund for the relief of distress in Ireland, for the purpose of assisting emigration, and that the offer has been accepted. The proposition seems to be to assist "some 3,000 or 4,000 to emigrate from the district of Connemara, using the funds at their disposal to supplement the Government grant of £5 a head, so as to prevent the emigrant from being in an entirely destitude condition on his arrival in America, Canada, or elsewhere."

It is probable, from what I have noticed respecting assisted emigration from this part of Ireland, that the amount of gratuity is but little more

than the sum necessary to pay the outward passage, and it is doubtful whether the emigrants have, as a rule, any means of their own.

I have the honor to be, your obedient servant,

A. B. WOOD,
Consul.

General E. A. MERRITT,
Consul-General of the United States, London.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSUL BARROWS, OF DUBLIN.

UNITED STATES CONSULATE,
Dublin, March 9, 1883.

SIR: I have the honor to acknowledge receipt of yours, 28th February, asking for information regarding the distress among the poor in my consular district. I inclose herewith reports from J. R. Tinsley, esq., United States consular agent at Limerick, and W. J. Eccles, esq., agent at Sligo, in answer to queries put. Mr. Tinsley is an influential gentleman who has filled many offices of trust in Limerick, and his judgment on the condition of the country may be relied on both by reason of his experience as a public officer and his long-time residence in the west of Ireland. Mr. Eccles is a prominent merchant in Sligo, an old resident, and thoroughly acquainted with his district. You will observe both agents unite in the opinion that heavy emigration to the United States may be expected this year. So far as my own knowledge extends, there is very little unusual destitution in the vicinity of Dublin or in any of the counties directly westward across Ireland. Reports of real distress will doubtless reach you from the northwest and southwest, but in my consular jurisdiction the people are moderately prosperous. The failure of the potato crop in any locality is a very serious matter to the peasant—that being his principal, and, in most cases, his only crop. The number of small holdings in Ireland of one to two acres is very large (about 67,000), and if it be true, as stated by an eminent authority, that one acre of potato crop will support a family of four persons per year, the disastrous results of severe weather may be readily seen.

The condition of the poor in Dublin presents the same general features as in other large cities, and while we have our full per centum of destitute, we have also very many admirable institutions of charity always open to the poor. Trade of all kinds is dull, and many artisans are out of employment, and still, as before stated, I do not know as there is any great change in the condition of the masses—no change at least or difference so far as my observation has extended for the past seven years.

In answering your questions *seriatim* I may say—

1st. The published accounts of distress in the county Donegal, county Clare, and the Isles of Arran are, in my judgment, substantially correct.

2d. In my own consular district the local Government boards and poor-law unions are abundantly able to afford such relief as may be needed.

3d. The general opinion is that there will be a very large emigration to the United States this year. My personal observation for several

years has shown me that the majority of emigrants go from the counties of Meath, Westmeath, Mayo, &c.; not many from the city or county of Dublin.

4th. I am quite certain that neither the Government, unions, or associations are forwarding paupers to the United States.

I have the honor to be, sir, your obedient servant,

B. H. BARROWS,
United States Consul.

General E. A. MERRITT,
United States Consul-General, London.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSULAR-AGENT TINSLY, OF LIMERICK.

CONSULAR AGENCY OF THE UNITED STATES,
Limerick, March 5, 1883.

SIR: I beg to acknowledge receipt of your letter of the 28th February asking me for information as to the distress prevailing amongst the poor within my consular jurisdiction, especially in the points numbered.

In reply I beg to say that it is very difficult to give an opinion on the real state of some districts within my consular jurisdiction, which are at a distance of many miles from this city, without visiting the localities where distress and destitution are said to exist. But as far as my knowledge and experience go, I do not believe that any exceptional distress prevails amongst the laboring classes in this city. The laborers have demanded an increase of wages this winter, and obtained it, and there is a fair amount of employment. As regards the county of Limerick, owing to the unusually wet winter, agricultural laborers must have felt the want of employment, as it was almost impossible to carry on outdoor work for several months, but on the whole I have not heard of exceptional distress amongst them. In the western parts of the county of Clare, which is also within my jurisdiction, I have good reason to believe the published accounts of distress and destitution are not exaggerated, as the land in those districts is poor and unproductive; and with the failure of the potato crop, and also of turf gathering last year, the poor must have felt it very much indeed.

2. The prospects of amelioration in the near future must depend upon the introduction of public works either by the Government or private enterprise.

3. Should work be not provided for the people, I expect to see emigration on the increase this year both to the United States and the colonies.

4. I am not aware that Government or the Guardians of the Poor are promoting emigration up to the present. A Mr. Crowley has been here lately, engaging about 300 young women and girls to proceed to New Hampshire, where he promises to give them employment in a cotton factory, and I understand he has succeeded in getting as many as he requires.

I have the honor to remain, sir, your obedient servant,

JOHN R. TINSLY,
United States Consular Agent.

B. H. BARROWS, Esq.,
United States Consul, Dublin.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSULAR-AGENT ECCLES, OF SLIGO.

UNITED STATES CONSULAR AGENCY,
Sligo, March 5, 1883.

SIR: In reply to your favor of 1st instant, I beg to send replies to your queries as under:

1. There is no doubt that real and very great distress exists along the western and northwestern seaboard of Ireland and in some inland districts also. I believe the published accounts in the Dublin Freeman's Journal newspaper which I have read are substantially correct.

2. The prospects of amelioration in the immediate future are not encouraging. Last year's potato crop was far below an average one, and in some districts it was a failure. The winter's fishing along the coast has also proved a failure, and this has caused a great scarcity of cheap food. The wet, rainy weather of last harvest and winter prevented much peat fuel being saved, and the poor people suffer much from want of fire in consequence. Unless employment be given, or temporary charity be distributed until the warm, dry weather comes, great distress will, I believe, prevail; but the laborers and small farmers do not like to become recipients of charity, and are anxious to get employment to enable them to earn sufficient to support themselves and their families. There is no prospect at present of this employment being obtained, so the outlook is gloomy indeed.

3. The existing conditions and the remedies offered by the governing authorities, viz, a choice between the work-house and emigration, will tend during the next few months to a very large emigration to the United States and the British colonies.

4. The Guardians of the Poor of many of the western and northwestern unions have scheduled portions of their districts under the emigration clauses of the late land act, and are at present receiving applications from poor families who choose to emigrate rather than enter the work-houses. In the Sligo Union there have been, I understand, already received applications for about 600 persons, and in some western unions the applications are very considerably larger. The bulk of those emigrants will go to the United States. They will receive £7 per head to cover cost of conveyance to the port of embarkation, passage money, and cost of outfit. It has been calculated this will cost about £6 each, which will leave about £1 to each on arrival. As it appears to me, the Guardians of the Poor are desirous to emigrate those families who are likely to be in a state of chronic poverty at home and save the rates from their possible support. If these people are thrown into the cities of the United States without provision being made beforehand for their employment, they may become burdens on the rates there also, and the country of their adoption may become a loser instead of a gainer by the influx. Another consideration is: Many of these people have been very badly fed, clad, and housed for some time past, and are likely subjects for disease if care be not taken to prevent overcrowding either on board the emigrant ships or in the lodging-houses at either side, and also great vigilance may be needed in watching after the sanitary arrangements on board the ships, so that sickness may be prevented and that the emigrants may land in good health. I believe also among

the families who intend to emigrate there will be infants and many children of both sexes under fourteen years. Old people will try to get out by giving fictitious ages, in order to be with the other members of their family, and similarly also with those suffering from insanity, idiocy, or other infirmities.

The class of emigrants who are being assisted by associations or philanthropists will be, I believe, a better class of emigrants, and will consist principally of artisans, farm laborers, and female servants, who would be likely to make useful settlers and good citizens. The same class of emigrants will form the great bulk of those going to the Australian colonies.

Your obedient servant,

WILLIAM J. ECCLES,
United States Consular Agent.

B. H. BARROWS, Esq.,
United States Consul, Dublin.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSUL LIVERMORE, OF LONDONDERRY.

CONSULATE OF THE UNITED STATES,
Londonderry, March 14, 1883.

SIR: I have the honor to reply to your letter duly received and asking information concerning the alleged state of destitution prevailing among the inhabitants within my district.

This district is a large one, and its remoter parts I have never visited, nor have I any acquaintance by which I could obtain any information that would be of value regarding the people in those parts. In the county of Donegal I know many persons, but the nature of the information desired is such that I can propound only somewhat vague inquiries, and only equally vague answers can be expected.

I am convinced by all the information I can gather from well-informed persons living among the scenes of the alleged distress that little or no distress exists beyond the normal condition of poverty and squalor in which some of the inhabitants have been brought up. There is no hunger, nor is there likely to be any, abundant provision for its prevention having been made by the unions.

It is well known that not a few of the inhabitants live upon holdings too small under most favorable circumstances for their support. Others have farms which might suffice if properly worked, but which, in fact, do not maintain them. The partial failure of the potato crop last year has driven all these people to their accustomed resort to Indian meal somewhat earlier than usual, with no better means for buying it. Some are suffering for want of fuel, which, it may be presumed, the unseasonable rains prevented them from procuring at the usual time.

An increased emigration to the United States and the colonies is expected this year from Donegal, the emigrants being of the better class, and a loss to the country. It is said that the Government agents endeavor, though with no great success, to induce the poor and lazy to emigrate. Whether the obstacle to such success is in the secret influence of the priesthood or the inertness of the people themselves, I

believe there is not perfect consent of opinion. On this subject I am not prepared with evidence that ought to be much regarded.

I regret that I am obliged to answer your inquiries so imperfectly.

Your obedient servant,

A. LIVERMORE.

The Hon. E. A. MERRITT,
Consul-General United States, &c., London.

IRISH DISTRESS AND EMIGRATION—Continued.

REPORT BY CONSULAR-AGENT FARRELL, OF WATERFORD.

UNITED STATES CONSULAR AGENCY,
Waterford, March 17, 1883.

DEAR SIR: Referring to my letter of the 6th instant, I beg to inform you that I have received information from a reliable source as to the state of affairs in the county of Kilkenny, and am therefore in a position to state that no exceptional distress exists throughout that county. At the same time the people are emigrating every day, and there is every prospect of the number of emigrants increasing instead of decreasing.

I have also received most reliable information from Wexford County, and am also authorized to inform you that the distress therein caused by the partial failure of the crops of the last year did not cause extreme suffering except perhaps in a few cases, and there is every hope that with the return of spring the severity of the past will be much mitigated and possibly disappear. My informant does not think that the distress will cause any exceptional emigration. Probably a few families will emigrate, and there will probably be an increase to a small extent in the number of individuals who will leave the county of Wexford, principally of the artisan and laboring class.

I am so far without any information from the county of Tipperary, but will at once advise you when I hear.

I have the honor to be, dear sir, your obedient servant,

WILLIAM H. FARRELL,
Consular Agent.

J. J. PIATT, Esq.,
United States Consul, Queenstown.

NOTES.

Foreign trade of Japan.—According to official returns transmitted to the Department, the foreign trade of Japan was as follows, during the month of December, 1882: Domestic exports, 3,285,000 gold yen; imports, 2,249,000 gold yen; showing an excess of exports of 1,036,000 gold yen. The export of specie and bullion amounted to 266,487 gold yen, an excess of 53,000 on the imports. The gold yen is equal to 99.7 cents.

Modification of Belgian tariff.—Information has been received at the Department from the Belgian minister that, by a royal decree of December 30, 1882, the optional duty of 10 per centum ad valorem on perfumes containing alcohol imported in packages holding at least half a liter, and the optional duty of five francs per 100 kilograms on sheepskins tanned and dressed, are abolished, and that the alcoholic limit above which wines are required to pay a supplementary duty on the alcohol contained therein is definitely reduced from 21 to 18 per cent.

Trinidad asphaltum.—Consul Towler has been asked for an explanation of the following calculation, which appeared in his otherwise interesting paper in the last number of these reports, on the Pitch Lake of Trinidad:

> This pitch deposit, I imagine, like any other mineral deposit, will become entirely exhausted in the course of time, resembling in this respect our oil-wells in Pennsylvania. But it will take a long time to do this, for the area of this visible deposit is about 100 acres, which is equivalent to 4,360,000 feet, and 4,360,000 feet surface and 1 foot deep will give the same number of cubic feet. Now, allowing the weight of 1 cubic foot of pitch to be 60 pounds (it is really more), we shall get by computation 261,360,000 pounds, which number divided by 2,240 gives 116,678 tons for the weight of a single layer of pitch on Pitch Lake 1 foot deep.
>
> We will now suppose that 60,000 tons of pitch (this year 30,000 will be near the real amount) are dug out annually, we shall find that this first layer of pitch will supply the world for two thousand years.

Direct shipment of wheat from Dakota to Scotland.—The following information, which was given to the press on its receipt, has been received at the Department from Consul Leonard, of Leith, under date of February 15, 1883:

> An interesting fact in connection with the importation of American wheat into Scotland has come to my knowledge. L. C. Porter, of Winona, Minn., has made contracts with John Jackson & Co. to supply them with wheat at Leith and Glasgow, and the grain to fill the first order is now in transit. The notable fact in this transaction is that the wheat is bought directly from the farmers by Mr. Porter at his warehouses at various places in Dakota, on the line of the Chicago and Northwestern Railway, and shipped directly, and without contact with other wheat, through to Glasgow, thus giving the buyer the certainty of securing a specific and uniform grade of hard spring wheat without admixture with other grades. This is, so far as known, the first instance in which the delivery of grain has been made so directly from the farmer in Dakota to the consumer in Europe, who, in this case, are not less than 4,500 miles apart.

American imports at Winnepeg.—Under date of February 23, 1883, Consul Taylor supplies the following information concerning the imports from the United States at Winnepeg:

> In my annual commercial report for 1882 I anticipated a large increase of imports into Manitoba from the United States during the fiscal year which will end June 30, 1883, over the remarkable statement forwarded by me for 1882, being $4,506,920,

against $1,496,986 in 1881, and $833,983 in 1880; more than corroborating my estimate. For the first or September quarter of the current fiscal year the total importation was $3,243,126, of which $2,826,225 was from the United States, $349,857 from Great Britain, and $21,636 from other countries. I group the imports of the September quarter for the last three years, that the ratio of increase, especially from the United States, may be more apparent:

Years.	United States.	Great Britain.	Other countries.
1880	$239,998	$72,910	$2,000
1881	613,406	177,167	3,211
1882	826,225	349,857	21,636

Even the December quarter, the dullest of the year, has more than doubled the trade of the previous year. The duties received, averaging 25 per cent. on invoice values, have increased from $175,213 in 1881 to $363,961 in 1882.

There is every probability, therefore, that the importation from the United States during the year ending June 30, 1883, will exceed $8,000,000.

With such a course of trade there is a growing sentiment in this province in favor of more liberal commercial relations between Canada and the United States. The question of the probability of a customs union between the countries is earnestly discussed in business circles.

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COMMERCIAL RELATIONS OF THE UNITED STATES.

REPORTS

FROM THE

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ON THE

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